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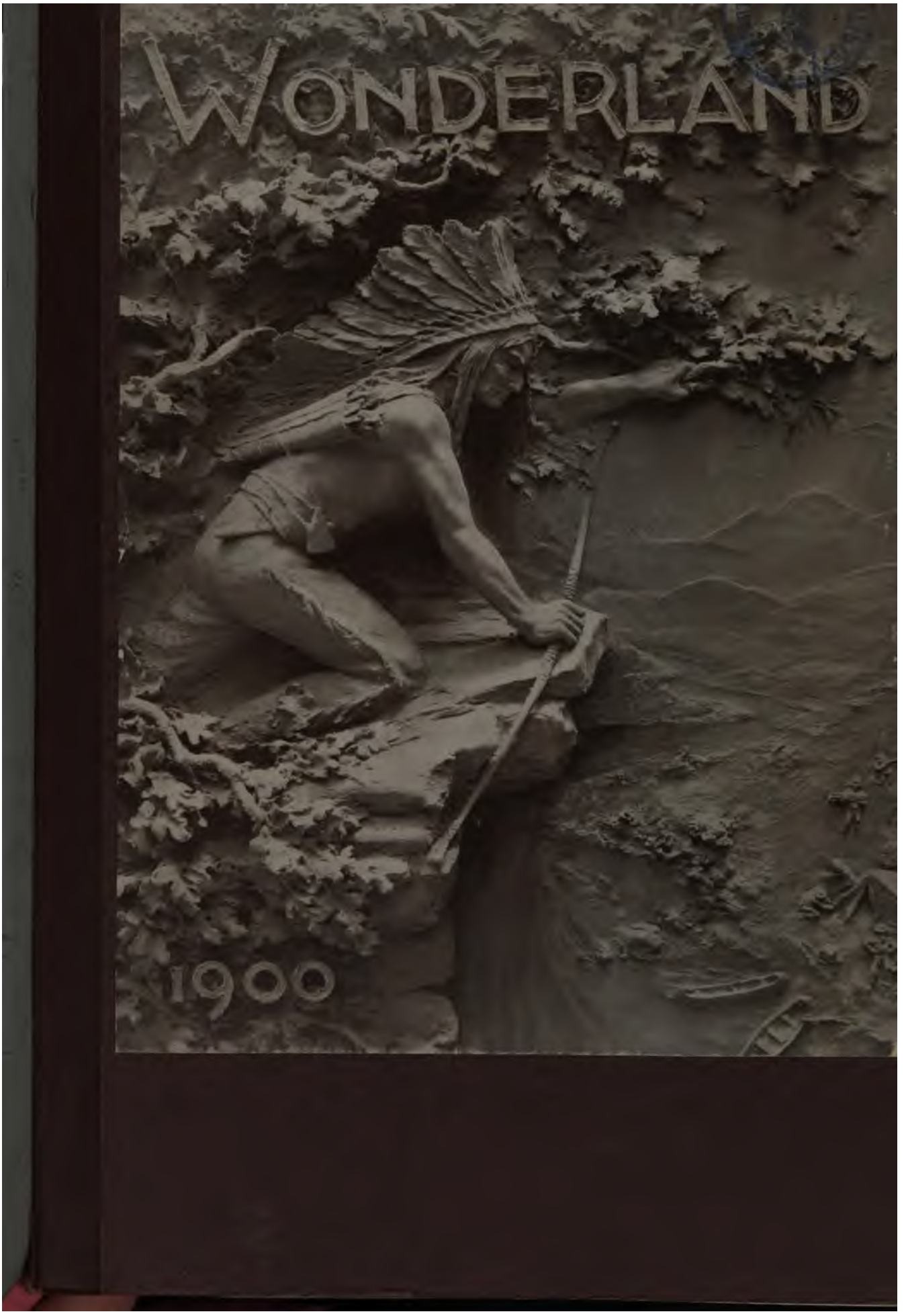
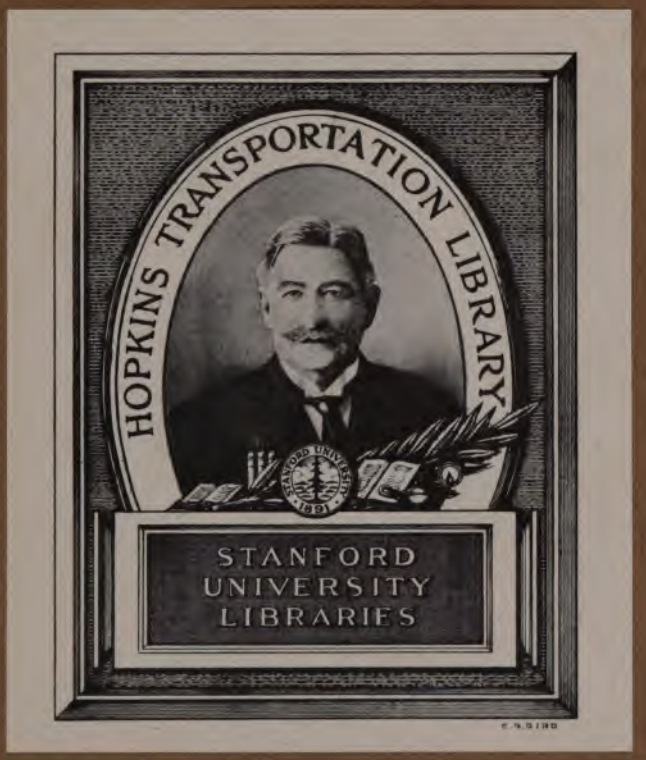

WONDERLAND
1900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From a painting by C. M. Russell, owned by Robt. Vaughn.

Lewis and Clark Meeting the Mandan Indians.

Wonderland 1900

BY

Olin D. Wheeler.

ILLUSTRATED

DESCRIPTIVE OF THE REGION TRIBUTARY TO THE

NORTHERN PACIFIC RAILWAY

AND INCLUDING MORE PARTICULARLY THE STORY OF

LEWIS & CLARK'S GREAT EXPLORATION OF THE NORTHWEST IN 1804-1806

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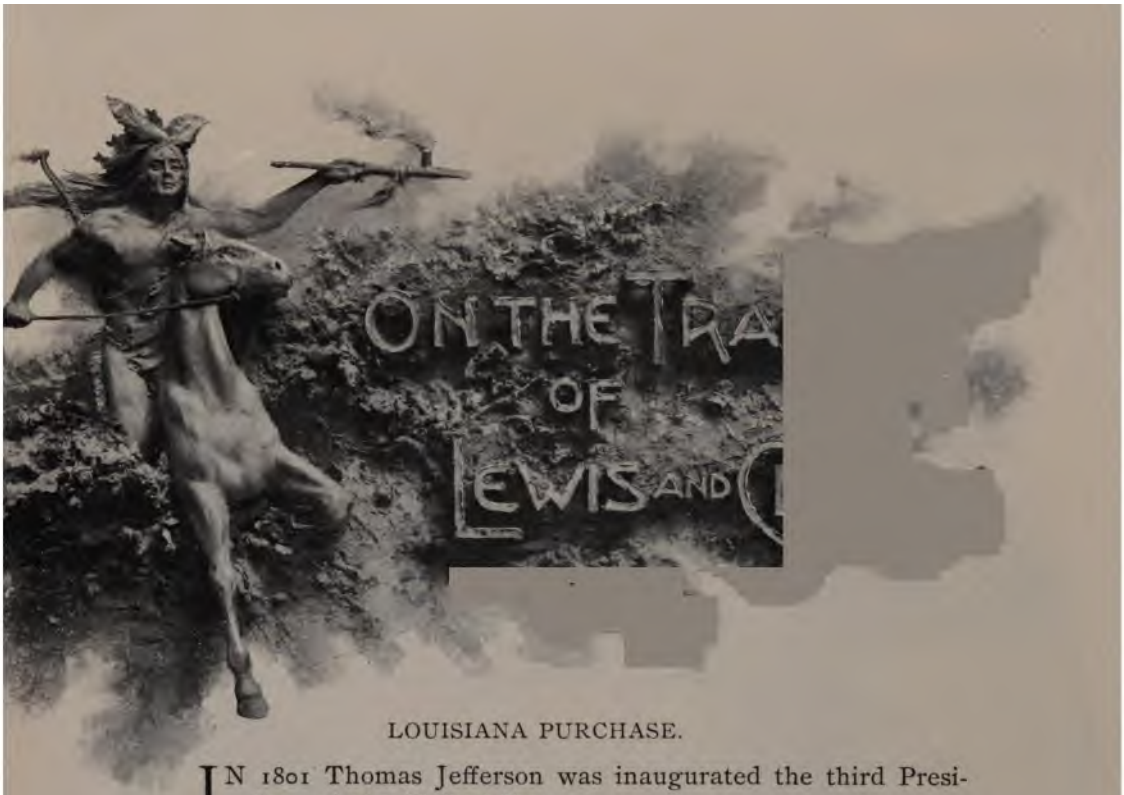


LOUISIANA PURCHASE.

IN 1801 Thomas Jefferson was inaugurated the third President of the United States.

Mr. Jefferson, a man of strong and lovable character, seems to have been allowed by Providence to do several things to entitle him to the eternal plaudits and gratitude of his countrymen. To bear the honor of drafting the Declaration of Independence were, methinks, enough for one man. But the fates were kind to the Sage of Monticello, and he was permitted to be a leading figure in another matter that, as the years roll on, seems destined to enroll his name almost as high on the scroll of fame as did the writing of the immortal Declaration. This was the purchase of Louisiana and its later exploration by Lewis and Clark.

It is not improbable that in history Jefferson's reputation will stand higher because of the exploration than on account of the acquisition. Although the two are now almost indissolubly connected, the former seems to have been peculiarly an idea of Mr. Jefferson's own, whereas the purchase itself was the result of a concatenation of fortuitous circumstances. Fate was the chariot and Napoleon Bonaparte the charioteer. Mr. Jefferson, 'tis true, played an important role in the drama, but so did Monroe, and Livingston, and Marbois, and Talleyrand.

Louisiana was a French possession originally, through La Salle's discoveries in the seventeenth century. In 1762, by a secret treaty, France conveyed Louisiana to Spain. It had been an expensive and troublesome province, and France was glad to be rid of it. In 1800, nearly forty years later, another secret treaty retroceded the country to France. Our relations at that time with both Spain and France were decidedly strained, the free navigation of the Mississippi River being a particularly troublesome question with the former.

Jefferson saw plainly that we must obtain certain territory on and adjacent to the mouth of the Mississippi River.

Jefferson.

No man dreamed of such a thing as the purchase of Louisiana, let alone suggesting its possibility. *The vast region was virtually thrown at us by Napoleon.*

When Mr. Jefferson began negotiations for the purchase of the desired territory — New Orleans and the Floridas — it was with Spain, which was supposed to own it. When subsequently it was ascertained that Spain had secretly reconveyed Louisiana to France, it was a complete surprise to the United States negotiators.

War between France and England being now — 1802 — almost certain, negotiations were transferred to France and pushed energetically, $2,000,000 being the sum our negotiators were authorized to give for the territory desired.

Livingston, our Minister to France, was reinforced by James Monroe, a man eminently qualified for his extraordinary mission.

Monroe.

Monroe reached France April 7, 1803. Apparently the stars in their courses fought for us, for on April 30th the treaty transferring all of Louisiana to us for $15,000,000 was signed, and was at once sent to Washington for ratification. Congress ratified it October 17, 1803, and on December 20th following, the French colors came down at New Orleans and the stars and stripes went up in their stead, and the Mississippi ran its course to the sea wholly through American territory.

Before Mr. Monroe reached France, Napoleon, with consummate astuteness, had decided to dispose of *all* of Louisiana instead of the insignificant portion we were trying to buy. To Talleyrand and Marbois, his Ministers of State and Treasury, he had said: "I know the full value of Louisiana, and I have been desirous of repairing the fault of the French negotiator who abandoned it in 1762. A few lines of treaty have restored it to me, and I have scarcely recovered it when I must expect to lose it. But if it escapes from me, it shall one day cost dearer to those who oblige me to strip myself of it, than to those to whom I wish to deliver it. The English have successively taken from France, Canada, Cape Breton, New Foundland, Nova Scotia, and the richest portions of Asia. They shall not have the Mississippi, which they covet. * * * I have not a moment to lose in putting it out of their reach. * * * I think of ceding it to the United

States. * * * They only ask of me one town in Louisiana, but I already consider the colony as entirely lost; and it appears to me that in the hands of this growing power it will be more useful to the policy, and even to the commerce, of France than if I should attempt to keep it." And again, "I renounce Louisiana. It is not only New Orleans that I will cede, it is the whole colony without any reservation. * * * To attempt to retain it would be folly. I direct you to negotiate this offer with the envoys of the United States. * * * I will be moderate in consideration of the necessity in which I am of making the sale." This determination to hasten matters is shown in the words to the Ministers: "Irresolution and deliberation are no longer in season. Do not even await the arrival of Mr. Monroe. Have an interview with Mr. Livingston this very day."

Napoleon.

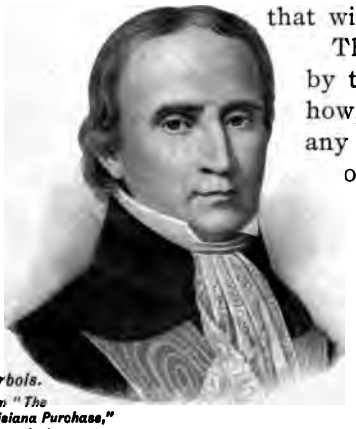
When the proposition to sell this vast domain was laid before the American diplomatists they were naturally rather staggered.

They at once rose grandly to the occasion, however. In those days of slow-sailing ships and no cables, they must themselves, unadvised by Jefferson and his Cabinet, assume the responsibilities of the moment and act one way or the other —either accept or reject. Like brave patriots they did this, accepted, and closed the bargain.

After a little haggling as to price, the matter was easily arranged, and thus England was prevented from seizing New Orleans and Louisiana in the great war that immediately followed, and the United States obtained a future empire.

Marbois, a personal friend and admirer of Monroe, and also a warm friend of our country, was an important adjunct in the negotiations.

When Napoleon was informed of the conclusion of the treaty he said, "This accession of territory strengthens forever the power of the United States; and I have just given to England a maritime rival that will sooner or later humble her pride."



Marbois.
From "The Louisiana Purchase," by permission of Binger Hermann.

This brief recital shows the important figure cut by the French Emperor himself in the affair, and how, as a matter of fact, we drifted into it without any preconceived intention on the part of Jefferson or anyone else.

And what of the country? There was great uncertainty at the time, and there is now to many, as to what we actually obtained. We did *not* buy the Oregon country. United States Land Commissioner Hermann gives the area

of the purchase as 883,072 square miles, or 565,166,080 acres, an area somewhat less than that of the original thirteen States. Roughly, the eastern limit followed the Mississippi from its mouth, north to the forty-ninth parallel at the Lake of the Woods; the forty-ninth parallel constituted the northern boundary, which extended to the Rocky Mountains; the western line ran south along the summit of the Rockies to the head waters of the Arkansas River in Colorado, thence down the Arkansas to the 100th meridian, thence south to the Red River, thence down that river to the ninety-fourth meridian, thence south along that meridian to the Sabine River, thence down the Sabine to the Gulf of Mexico, while the Gulf itself formed the southern line.

The Louisiana Purchase was larger in area than Great Britain, France, Spain, Germany, Portugal, and Italy thrown into one. Out of it have been carved entire, Arkansas, Missouri, Iowa, Nebraska, North and South Dakota, and Indian Territory; nearly all of Louisiana, Oklahoma, Kansas, Wyoming, and Montana; about two-thirds of Minnesota, and one-third of Colorado. In 1890 the population within its limits exceeded twice that of the United States at the time of the purchase. To-day it is the greatest mineral, grazing, timber, and corn and wheat region of the United States.

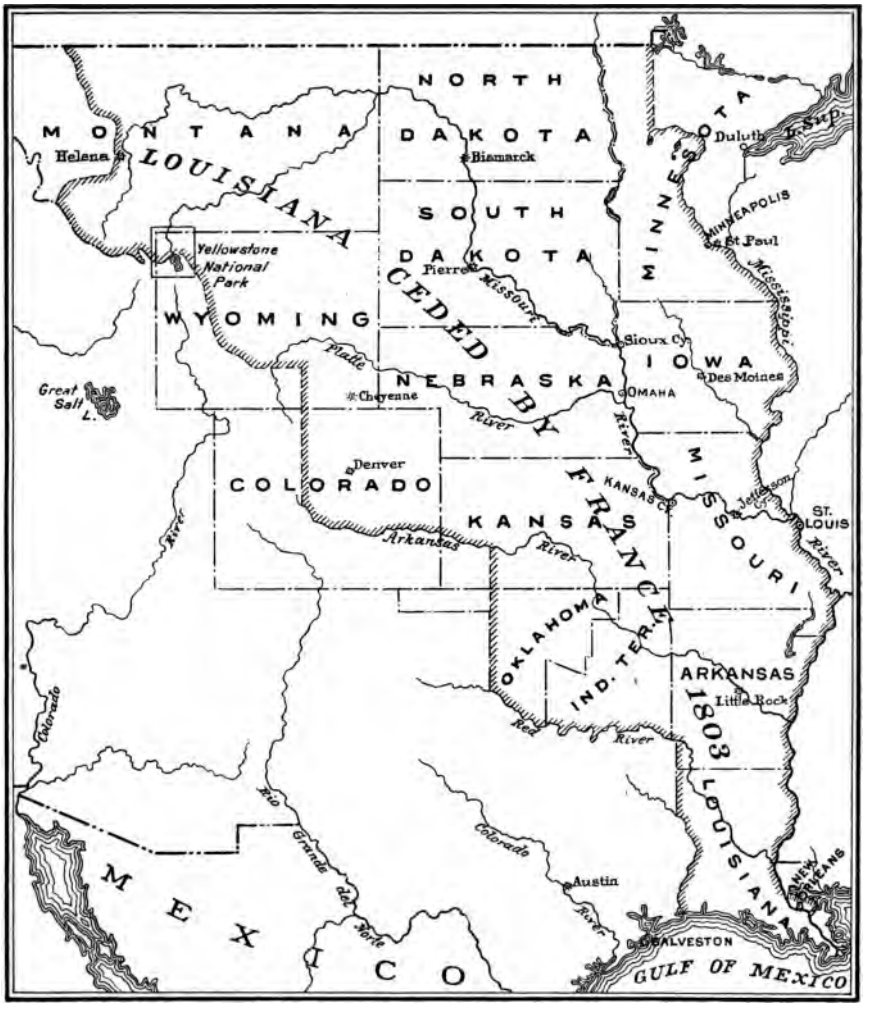
This then was the country that Lewis and Clark were to explore.

BLAZING THE WAY.

I have said that the idea of this exploration was original with Mr. Jefferson. He explicitly states in his memoir of Captain Lewis that, when resident in Paris, he induced one John Ledyard, a well-known citizen of Connecticut, to attempt an exploration across the Northwest. Ledyard fell in with the idea, through Jefferson obtained Russian credentials, and started across Russia and Siberia, whence he was to cross the Pacific to Nootka Sound and thence, via the Missouri, continue on across this country. After he was well started the Russian government reconsidered its decision and compelled Ledyard to return.

In 1792 Jefferson enlisted the American Philosophical Society in the matter, and although Captain Lewis then begged the privilege of going, a French botanist, André Michaux, was selected and he started on the journey. He went as far as Kentucky when *he* was recalled by the French Minister, and thus ended the second attempt.

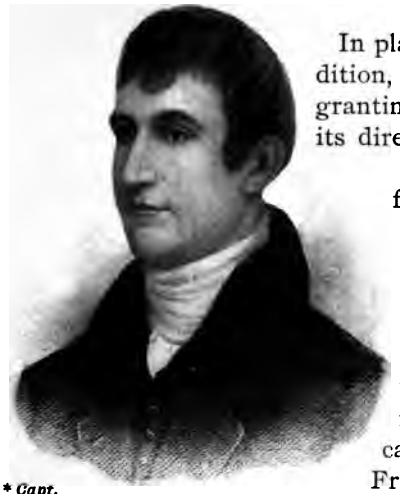
In January, 1803, before we had purchased Louisiana, Jefferson sent a confidential message to Congress which resulted in an appropriation of $2,500 for this exploration, *across the country of a foreign power* — at that time France. Within three months (about) the country belonged to us, so that, actually, the exploration became one of our own territory. This fact was, however, not known here until July, and Jefferson's instructions regarding the expedition were drawn upon the theory that the country belonged to France.



The Louisiana Purchase.
From "The Louisiana Purchase," by permission of Binger Hermann.

Jefferson's message to Congress, partially quoted in Coues' Lewis and Clark, published by Francis P. Harper, New York, is a peculiar one, and well worth reading. The estimate for expenses upon which the appropriation was based is in Lewis' handwriting and was probably his own idea of what would be needed. Here it is:

Mathematical instruments	$ 217
Arms and accouterments extraordinary	81
Camp equipage	255
Medicine and packing	55
Means of transportation	430
Indian presents	696
Provisions extraordinary	224
Materials for making up the various articles into portable packs	55
For the pay of hunters, guides, and interpreters	300
In silver coin, to defray the expenses of the party from Nashville to the last white settlement on the Missouri	100
Contingencies	87
Total	$2,500



* Capt. Meriwether Lewis.

In planning for the leadership of this immortal expedition, Mr. Jefferson had, this time, no hesitancy in granting Captain Lewis' request to be trusted with its direction.

William Clark, a friend of Lewis, was selected for the position of second in command.

It is generally supposed that Clark was an army captain, as was Lewis, but Coues shows that this was not the case. It would seem that it was intended that he should be so commissioned, but in some manner not disclosed, when his commission was issued, March 26, 1804, it was as a second lieutenant of artillery, not a captain of engineers, as Clark had expected. From a military point of view, therefore, he was quite subordinate to Lewis, but in the conduct of the expedition he was co-equal with him, as had been promised. He had formerly been an army captain and the title still clung to him, which has added to the confusion as to relative rank.

Jefferson's instructions to Captain Lewis were lengthy and comprehensive. They evince not only a deep regard for the complete technical success of the enterprise, but an almost fatherly interest for the comfort and safety of those engaging in it.

Briefly, some of the objects were to explore the Missouri and Columbia rivers and their principal branches; take astronomical observations for latitude and longitude at important points; make a study of the Indian tribes; observe the character of the country passed over, its fauna, flora, geology, and meteorology. Lewis was particularly enjoined to treat the Indians with kindness and consideration.

The facsimile of Jefferson's letter of July 4th, written subsequent to his letter of general instruction, will show the determination of the President that all that could possibly be done for the success and comfort of the party should be.

LEWIS AND CLARK'S ROUTE.

It must be recalled that in 1804–1806 the Northwest was a wilderness given over to the Indians, fur traders, and wild beasts. With few exceptions the water courses, valleys, mountains, and general physical features of the country were unknown and unnamed.

The expedition ascended the Missouri River from its mouth to Fort Mandan, north of Bismarck and Mandan, N. D., where they spent the winter of 1804–5. They then

* Capt. William Clark.

* From "Coues' History of Lewis and Clark's Expedition," 1893, by permission of Francis P. Harper.

Dear Sir

Washington. U.S. of America. July 4. 1803.

In the journey which you are about to undertake for the discovery of the course and source of the Missisipi, and of the most convenient water communication from thence to the Pacific ocean, your party being small, it is to be expected that you will encounter considerable dangers from the Indian inhabitants. should you escape those dangers and reach the Pacific ocean, you may find it imprudent to hazard a return the same way, and be forced to seek a passage round by sea in such vessels as you may find on the Western coast. but you will be without money, without clothes & other necessaries; as a sufficient supply cannot be carried with you from hence. your resource in that case can only be in the credit of the US. for which purpose I hereby authorise you to draw on the Secretaries of State, of the Treasury, of War & of the Navy of the US. according as you may find your draughts will be most negociable, for the purpose of obtaining money or necessaries for yourself & your men: and I solemnly pledge the faith of the United States that these draughts shall be paid punctually at the date they are made payable. I also ask of the Consuls, agents, merchants & citizens of any nation with which we have intercourse or amity, to furnish you with those supplies which your necessities may call for, assuring them of honorable and prompt retribution. and our own Consuls in foreign ports where you may happen to be, are hereby instructed & required to be aiding & assisting to you in whatsoever may be necessary for procuring your return back to the United States. And to give more entire satisfaction & confidence to those who may be disposed to aid you, I Thomas Jefferson, President of the United States of America, have written this letter of general credit for you with my own hand, and signed it with my name.

Th: Jefferson

To Capt. Meriwether Lewis.

Jefferson's Letter of Credit to Lewis.

proceeded to the Three Forks of the Missouri, near the present town of Logan, Mont., thence up the Jefferson branch, across the Continental Divide at Lemhi Pass, and attempted to descend the Salmon River. Repulsed, they crossed the Bitter Root range northward into the Bitter Root Valley, descended the latter to the mouth of Lolo Creek, followed the creek westward to the divide, crossed the range a second time to the Clearwater River, followed down that stream to the Snake River, thence down the Snake to the Columbia, and thence to the Pacific. Near the mouth of the Columbia, on Lewis and Clark's River, not far from Astoria, they passed the winter of 1805–6.

On the return they retraced their outgoing route to the mouth of the Wallawalla River, from which point they "cut across lots" overland to Lewiston, at the junction of the Snake and Clearwater rivers. They then, practically, retraced their old route across the mountains to the mouth of Lolo Creek in the Bitter Root Valley. There they divided their forces, Clark returning, with some variation of route, to the Three Forks of the Missouri, while Lewis struck out northeast across the mountains via Hellgate and Big Blackfoot rivers, and Lewis and Clark's Pass, to the Great Falls of the Missouri. At that point Captain Lewis subdivided his party, and while Sergeant Gass and his subparty proceeded down the river with the luggage, etc., Lewis and the others made sundry explorations northwest on the head waters of Maria's River, joining Gass later at the mouth of that stream. From there they floated down the Missouri to the mouth of the Yellowstone, near which they rejoined Captain Clark and party, who had crossed the Rockies from the Three Forks to the Yellowstone River, and then followed down that stream. United again, they pursued their course down the Missouri to St. Louis, where the expedition was disbanded.

It will be seen that much of the region explored by Lewis and Clark is now largely tributary to the Northern Pacific Railway. In places the rails almost literally follow Lewis and Clark's trail.

The exploration was a remarkable one, not more in its important achievements than in minor details, management, progress, and results. It may well be regarded as our national epic of exploration.

The expedition started from the mouth of Wood (Du Bois) River, opposite the mouth of the Missouri, in Illinois, May 14, 1804, and reached St. Louis on its return September 23, 1806, thus consuming in its work two years, four months, and nine days. During this time not one disagreement or clash of authority occurred between the leaders, a remarkable record. There was but one death, that of Sergeant Floyd on August 20, 1804, although there was much sickness. There was but one suggestion of mutiny, and this on the part of one man only, who, besides being promptly punished, afterward fully atoned for his fault. There were two attempts at desertion, one of which was successful; in the other case the man was promptly disciplined and discharged from service. Through all their vicissitudes and dangers there was but one really serious accident as I recall, Captain Lewis being accidentally shot through the thigh when well on the way home. He recovered before reaching St. Louis.

Although their route was through an Indian country entirely, and the Indians were in most instances the wildest of nomads, in some cases never having seen a white man, yet there was but one serious difficulty with them, and then it was necessary to kill two Indians. Their almost uniformly kind reception by, and treatment of, the

Indians, and their absolute and utter dependence upon them, time after time, for food with which to save themselves from starvation, furnishes perhaps the most caustic and cutting criticism that can be made upon the Government's subsequent treatment of the red man.

Heroes are not all of the martial sort. It required, perhaps, a more sturdy type of heroism for these men to penetrate an unknown wilderness than for Wolfe to climb the Heights of Abraham, Thomas to hold on at Chickamauga, Pickett to charge Cemetery Ridge, Dewey to steam past Corregidor Island, or Hobson to blow up the Merrimac.

LEWIS AND CLARK'S ITINERARY, TABULATED.

MONTH.	YEAR.	PLACE.	Miles from m'th of Missouri River.	REMARKS.
May 14..	1804	Left mouth of Missouri River	0	
June 26..	1804	At mouth of Kansas River.....	340	
July 21..	1804	At mouth of Platte River	600	
July 30..	1804	At Council Bluff.....	650	*Not* Council Bluffs, *Iowa*.
Sept. 20..	1804	At Big Bend of Missouri River	1,172	Below Pierre, South Dakota.
Nov. 2...	1804	Arrived at Fort Mandan.....	1,600	Below Knife River, North Dakota, where they passed winter of 1804-1805.
April 7..	1805	Left Fort Mandan.....	1,600	
April 26.	1805	At mouth of Yellowstone River.....	1,880	
June 2...	1805	At mouth of Maria's River.....	2,521	
June 16..	1805	At Portage Creek, Gt. Falls, Mont...	2,575	
July 25..	1805	At Three Forks of Missouri River..	.....	Gallatin Valley, Montana.
Aug. 12..	1805	At head waters of Missouri River ..	3,096	"Fountain," or spring, at head of Jefferson Fork (Beaverhead) of Missouri River.
Sept. 9...	1805	At mouth of Lolo Creek	.....	Bitter Root Valley, Montana.
Oct. 10...	1805	At mouth of Clearwater River	3,567	Idaho.
Oct. 16...	1805	At mouth of Snake River	3,721	
Oct. 30...	1805	At Cascades of Columbia River	3,950	
Dec. 7...	1805	Arrived at Fort Clatsop	4,135	On Lewis and Clark River, Ore., where they passed winter of 1805-1806.
March 23	1806	Left Fort Clatsop.....	4,135	
April 27.	1806	At mouth of Wallawalla River	.....	Washington.
June 30..	1806	At mouth of Lolo Creek.		
Aug. 3...	1806	At mouth of Yellowstone River	.....	Captain Clark's party via Three Forks.
Aug. 7...	1806	At mouth of Yellowstone River	.....	Captain Lewis' party via Great Falls, Montana.
Sept. 23..	1806	Arrived at St. Louis.		

PERSONNEL OF THE EXPEDITION.

It is safe to assume that particular care was taken in the selection of those composing the expedition. There were few lapses from duty, and the chronicles and results of the exploration show that the members were persons of manly, rugged character, generally — yes, even the squaw — and equal to situations of delicacy and responsibility. A few of these persons should be specially mentioned.

First, of course, come the leaders. Captain Meriwether Lewis was a Virginian of distinguished Scotch ancestry, born in 1774, and,

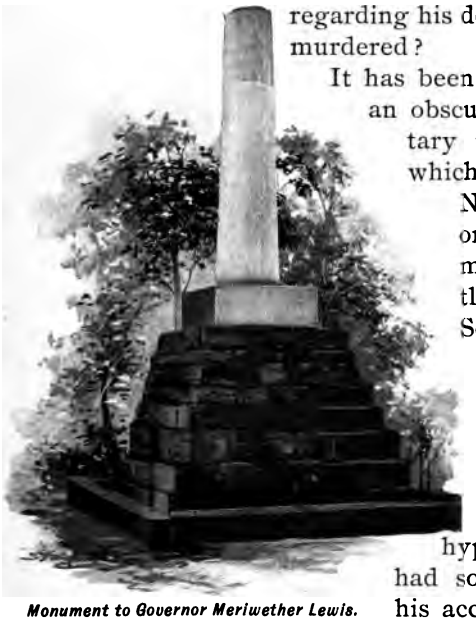
therefore, thirty years of age when he assumed command of the expedition.

Lewis' early life was of a nature that prepared him in several ways for the successful direction of such an exploration.

In due time he entered the army; he became President Jefferson's private secretary, and was given command of the Louisiana expedition of exploration.

Upon his return he was made Governor of Louisiana, which position he held at the time of his death.

The most interesting question in connection with Lewis now is regarding his death. Did he commit suicide, or was he murdered?



Monument to Governor Meriwether Lewis. Erected in 1848 by the Legislature of Tennessee, on the spot where Lewis died, October 11, 1809.

It has been supposed that he committed suicide at an obscure tavern in Tennessee, on the old military road known as the "Natchez Trace," which extended from Nashville, Tenn., to Natchez, Miss., and seems to have been one link in a system of "traces" or primeval roads, from the Atlantic Coast settlements to the interior of the West and South, in the earlier settlement of the country.

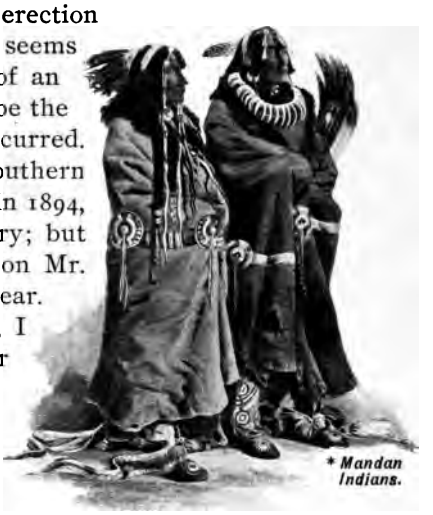
President Jefferson evidently considered this the manner of his death; but it does not appear that special effort was made to determine the fact. Lewis was said to be subject to hereditary hypochondria, and at the time he died he had some dispute with the Government about his accounts.

The taverns or stations on those primitive roads were lonely, rude affairs, and at least in some cases were said to be controlled by robbers and ruffians. Such was the case with the Grinder stand, where Lewis died, and where he was supposed to have killed himself in one of his periods of depression. This spot was some sixty to seventy miles southwest from Nashville, and the remains of the tavern are still visible.

Lewis was buried there, and in 1843 the Tennessee Legislature formed Lewis County, in Captain Lewis' honor, and in 1848 it appropriated $500 to erect a monument over his grave. His remains rest in the center of this county.

In 1891, Mr. James D. Park, a lawyer of Franklin, Tenn., who had been investigating the subject, publicly combated the suicide theory, and stated that Lewis had been murdered and robbed by Grinder himself. The report of the Monument Committee to the Tennessee

General Assembly in 1849–50, announcing the erection of the shaft, referring to Lewis' death, says: "It seems to be more probable that he died by the hands of an assassin," and it appears as though this might be the feeling of those living near where the tragedy occurred.



* Mandan Indians.

Mr. Verne S. Pease, in an article in the Southern Magazine, and copied into the Army Magazine in 1894, where I saw it, argues against the suicide theory; but whether from original investigation, or based on Mr. Park's or someone else's researches, does not appear.

Hoping to gain more light on the subject, I wrote to Mr. Park, and received in reply a letter from his father, Dr. J. S. Park, announcing his son's death in 1897. I quote a sentence: "The further my son investigated the matter the more certain he believed that Lewis was murdered."

Mrs. Caroline D. M. Goodlett of Nashville, Tenn., a descendant of Captain Lewis, writes me an interesting letter regarding Lewis' ancestry and life. Regarding Lewis' death, I quote from the letter as follows:

"Of course it will ever be shrouded in mystery, but my father, Mr. Charles Meriwether, visited his aunt, Meriwether Lewis' mother, about 1820. She was then eighty years old, but remarkably vigorous in mind and body, rode around the country on horseback like a girl, my father said, and was fond of talking of her son. She said his letters, written to her before starting on his trip home were full of love and affection, and so hopeful of a good time with his old friends, that *she never entertained the idea for a moment* that he had committed suicide. The theory that the family have ever advanced is that he was murdered by his Spanish servant who was traveling with him on horseback, to take charge of his baggage and to care for his horses. We suppose that traveling together for a long distance, it is probable that Meriwether Lewis, being of a social and confiding nature, had spoken to the Spaniard of the valuable papers and maps he was carrying to Virginia, and

* Mandan Village and "Bull" Boats.

* From "Travels to the Interior of North America in 1832-3-4." By Maximilian, Prince of Wied, 1843.

knowing that the Governor of the State would not travel without plenty of money, that the avaricious and treacherous nature of the servant got possession of him and he determined to possess himself of what valuables Captain Lewis had. The servant was never afterward heard from, nor were the papers.

"Why should a man in the zenith of his glory, with everything to live for, looking forward to a visit to his beloved mother, sure of a warm welcome from his patron and dear friend, the President, and of the grateful appreciation of his countrymen, kill himself if he was sane? His family can attest to the fact that there was no insanity in his branch of the family.

"As a child he was remarkable for his fine common sense.

"I will relate a little incident that happened when he was nine years old: The settlement near Charlottesville, Va., was expecting to be attacked by some hostile Indians, and all the able-bodied men had gone in search of them, and the women and old men and children, afraid to stay in their houses, went down into a deep wood to camp. While sitting around the fire an Indian arrow was shot into the camp; in an instant all was confusion, women screamed and clasped their children in their arms, for they knew that the Indians could see them and the darkness hid the Indians. Meriwether Lewis, with the foresight of an experienced Indian fighter, jerked up a bucket of water and put out the fire, and then they fired off their guns and drove the Indians off."

Mr. R. T. Quarles, corresponding secretary of the Tennessee Historical Society, and also a descendant of Captain Lewis, corroborates Mrs. Goodlett's statement that the family belief is that Lewis was murdered by his body servant, stating that not only did the Captain have in his possession quite a sum of money, but also family jewels of far greater value.

The query naturally suggests itself, might there have been, after all, a suddenly formed conspiracy *between the servant and Grinder* to assassinate Lewis and divide the spoil?

The story is inconclusive. Both theories are largely based upon circumstantial evidence, more or less at second hand, and the matter can not, now, be absolutely determined. Personally, I can not resist the feeling that, as the evidence is weighed, the theory of murder will find more believers than the other.

Dr. Coues ably discusses the question of Lewis' death in his edition of Lewis and Clark. It is supposed to have occurred on October 11, 1809, Lewis being at the time thirty-five years of age.

The illustration of the Lewis monument accompanying this narrative is from a photograph furnished by Doctor Park.

The monument is made of Tennessee marble, is twenty and one-half feet in height, and the broken column is two and one-

half feet in diameter at the base. On each side of the plinth there is a different and appropriate inscription.

William Clark (Clark erroneously spelled with a final e usually) was also born in Virginia, in 1770, and was therefore four years older than Lewis. He came of a distinguished family, his brother, Gen. Geo. Rogers Clark, of the Revolution, being the most conspicuous member of it aside from William himself. His parents moved to Louisville, Ky., when he was a lad. In 1791 he entered the army, from which he retired in 1796 because of ill health. During this time Lewis for a time was a subordinate under Clark.

Clark resigned his commission upon his return to St. Louis in 1806. He was almost immediately made a brigadier general of the militia of Louisiana and Indian Agent for Louisiana, by Jefferson.

After Lewis' death he became, in 1813, Governor of Missouri Territory, which position he held until the Territory became a State, in 1820. He subsequently held many and various important Federal positions in the West, and died on September 1, 1838, at the age of sixty-nine years.

It was a rare combination that met, in Lewis and Clark, and to this fact the grand results of that exploration are due.

Of the four sergeants, Ordway, Pryor, Floyd, and Gass, little is known except of the last two.

Charles Floyd, a Kentuckian of good family, died and left a journal which was found in 1893, and then accidentally, by Reuben G. Thwaites, secretary of the Wisconsin Historical Society. This journal, which has been published in pamphlet form, while being a valuable one, is a curiosity. It is full of original orthography and syntax, as indeed were the journals of both the captains.

Patrick Gass, the sergeant who succeeded Floyd, kept a journal which, after being purged of its orthographic kinks by a Scotch-American pedagogue, was first published in 1807 and passed through many editions.

Upon the disbandment of the expedition in 1806, Captain Lewis gave Gass a certificate testifying to his high character and efficiency.

Gass lived to be ninety-nine years old, dying in 1870 at Wellsburg, W. Va., after a life of a decidedly variegated sort.

John Colter, a thoroughly reliable man, yet not more so than several others, will live in history after they are forgotten.

After Colter left the explorers at the Mandan towns in 1806, he made an extended trip to the head waters of the Yellowstone River. This resulted in his being the first white man, as the record stands, to explore any part of what now constitutes Yellowstone Park. Colter's route, as charted on Clark's map of 1814, is susceptible of various constructions. He seems to have passed along the west shore of Yellowstone Lake — Lake Eustis of Clark — and the north side of the Grand Canyon. If he expatiated upon what

he saw, his tales were probably discounted at 99 per cent, as were James Bridger's later on, and no mention made of them in print.

Colter was also the hero in a tragic episode, on the head waters of the Jefferson River, where a companion trapper was murdered by Indians, himself finally escaping almost miraculously.

The story is related by Bradbury, an English naturalist, in his "Travels in the Interior of America," published in Liverpool in 1817. Irving gives the story in "Astoria;" Chittenden rehearses it in "The Yellowstone National Park," and the writer has related it in "Indian-

*Fort Clark.

land and Wonderland," published by the Northern Pacific Railroad, in 1894.

Colter is best known as the discoverer of Yellowstone Park and for the adventure referred to.

Sacajawea, "the Bird Woman," and wife of Chaboneau, the interpreter, filled an important place on the expedition. Although only a squaw of the Shoshone tribe, captured when a child and carried as a slave to the Mandan country and purchased by Chaboneau for a wife, she was one of the immortal spirits of the party. She canoed and trudged and climbed as well as any man in the outfit, interpreted when her husband couldn't, and at critical points gave suggestions and advice which the chivalrous captains weighed at its true value. They were not afraid to frankly acknowledge their debt to her, and they speak most highly of her in referring to their parting at the Mandan towns in 1806.

This woman should have a granite shaft taken from her native hills, erected in her memory on that limestone hill at the Three Forks of the Missouri, where every traveler on the Northern Pacific trains could see it and be reminded of what we owe to a poor Snake

*From "Travels to the Interior of North America in 1832-3-4." By Maximilian, Prince of Wied, 1843.

Indian squaw, who never received a cent from a civilized nation for all that she underwent in 5,000 miles of wanderings.

The two Fields brothers, Kentuckians, were particularly useful men to Lewis and Clark, as was also Shields, skilled as an artificer. Shannon, a Pennsylvanian, was another valuable man and was of higher social standing than any of the others. He rendered efficient aid, too, in the preparation of the report, and eventually rose to be United States Attorney, State Senator, and Judge.

Drewyer, a half-breed, was a crack hunter, and received the highest commendation from Captain Lewis as a hunter, woodsman, and interpreter.

York, Captain Clark's colored servant, was a great curiosity to the Indians, both because of his skin and his prodigious strength. The Indian women were specially interested in him.

THE START.

Although Captain Lewis left Washington July 5, 1803, the usual delays made it necessary to lie over at the mouth of the Missouri during the winter of 1803–4.

Besides the necessary supplies and equipment, camp equipage, arms and ammunition, etc., they transported a quantity of stores for presents and barter with the Indians.

These consisted largely of articles of clothing trimmed and colored to attract the savage eye, beads, looking-glasses, paints, flags, knives, tomahawks, medals, etc.

Of supplies, they, of course, could not take along enough to last them for the entire trip, as will be seen. Their hunters were expected to supplement these with game killed.

There were three sizes or grades of medals — one, seemingly the largest and the preferred one, "a medal with the likeness of the President of the United States;" the second, "a medal representing

some domestic animals;" the third, "medals with the impression of a farmer sowing grain." A description and illustrations of the first are given further along, the medal itself having been, as will be explained, taken from the grave of an Indian chieftain on the banks of the Clearwater River in Idaho. These medals were given to chiefs only.

It is not, perhaps, improbable that certain beads, a hatchet, etc., in my possession, obtained from Indian sepulchers along the Clearwater and Columbia rivers may, some or all of them, have been distributed by Lewis and Clark.

The means of transport were three boats; a keel-boat or batteau, fifty-five feet long, drawing three feet of water, having "one large square sail and twenty-two oars" for motive power; and two open boats, "periogues"— mackinaws — one propelled by six, the other by seven oars. The large boat was quite an affair, having a forecastle and cabin, and so arranged that in case of attack those on board might fight under cover. Two horses were also "to be led along the banks of the river, for the purpose of bringing home game, or hunting in case of scarcity."

In order that a detailed and complete record of the expedition might be preserved, an elaborate itinerary and notes were scrupulously kept by the principals. It is known, too, that Sergeants Ordway, Floyd, and Gass kept journals. It would appear from the Preface to Gass' Journal (Philadelphia edition, 1810) that the captains "enjoined upon the several persons belonging to the corps, who were considered capable, to keep journals, and every necessary information and assistance [was] given them for that purpose." Captain Lewis states that seven of the men kept journals, but he does not name them. Frazier was one, but neither his nor Ordway's journal was ever published. At length everything was ready, the ice in the Missouri gone, and on Monday, May 14, 1804, they started up the river.

Starting late, they made but a few miles the first day. If Gass is to be taken as a criterion, that first camp was one of sober reflection. He says: "Here we had leisure to reflect on our situation, and the nature of our engagements; and, as we had all entered this service as volunteers, to consider how far we stood pledged for the success of an expedition, which the Government had projected, and which had been undertaken for the benefit and at the expense of the Union; of course of much interest and high expectation."

Their journey up the river was a steady one, though delays from sunken logs, sand bars, and head winds were frequent. The hunters skirted the country for game, and they traded and powwowed with the Indians. At one point they exchanged two quarts of whisky for four deer, with the Kickapoos.

On July 21st they passed the Platte River, and on July 30th

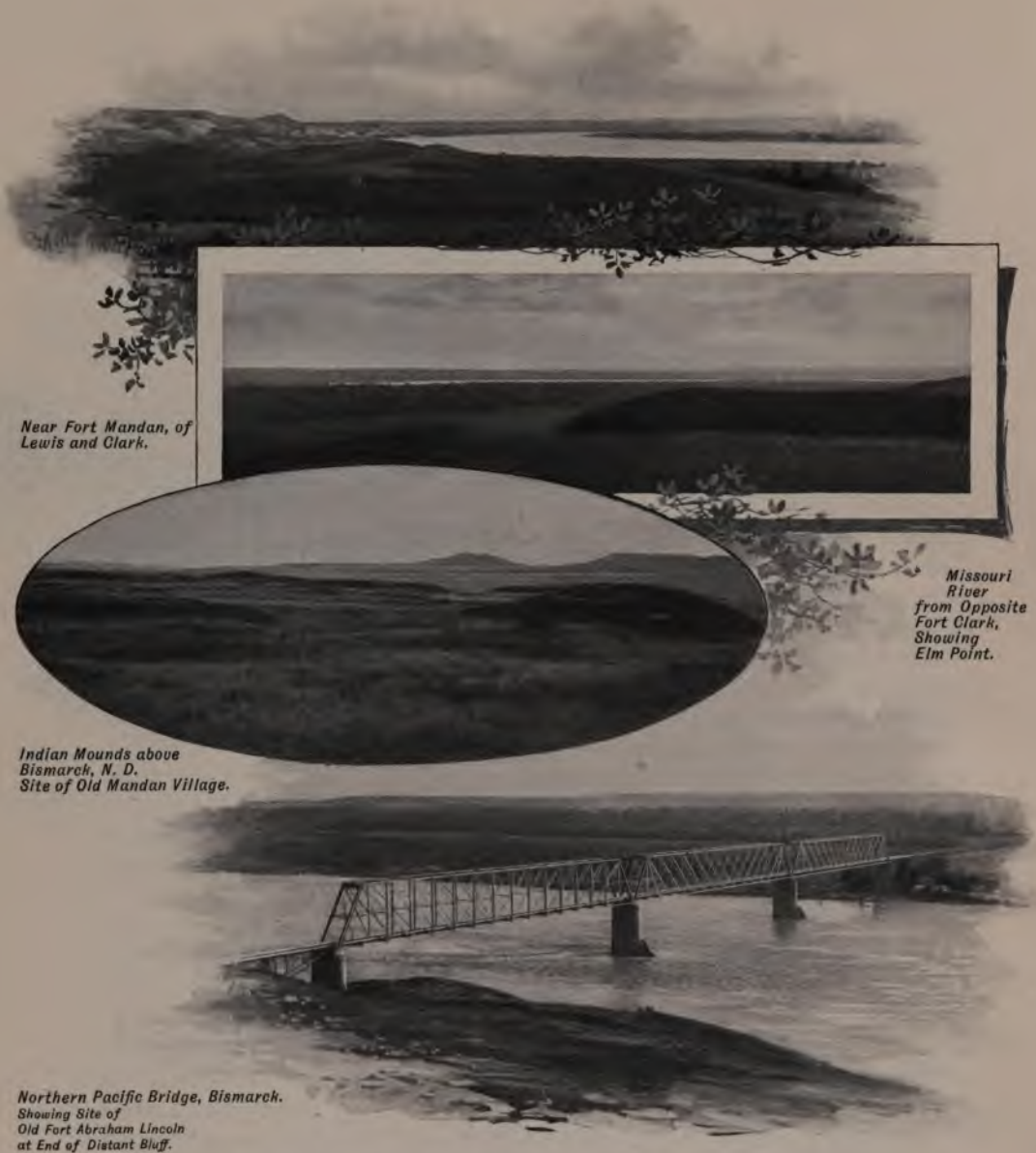
reached Council Bluff, where they held a council with the Otoe Indians. Council Bluff was a high bluff north of Omaha, on the Nebraska side—"south" of Lewis and Clark—of the river, not, as commonly supposed, where Council Bluffs, Iowa, now stands. At this council, quite a ceremonious affair, they made their first distribution of presents, including a first-grade medal to the grand chief, two second-grade medals, and two of the third grade. In addition there were distributed some paints, garters, powder, whisky, etc. At this point we first hear of a wonderful "air gun" that was a "great medicine" to the Indians whenever its occult powers were shown. I have seen no description of it, and there is no mention of it in the enumeration of supplies, etc., but its effect upon the "untutored mind" was instantaneous and lasting.

Sergeant Floyd's Grave at Sioux City, Iowa.

On August 19th, Sergeant Floyd was taken seriously ill with "Biliose Chorlick." He grew worse, and on the 20th died. He knew he must die, and said, just before he passed away, "I am going away; I want you to write me a letter."

He was buried on the summit of a prominent bluff near the mouth of a small river, now a park within the present limits of Sioux City, Iowa. The names Floyd's Bluff and Floyd's River attach to them today. Sergeant's Bluff, named in honor of Floyd, is still farther down stream. Floyd "was buried with the honors of war, much lamented, a seeder post with the name Serg't C. Floyd died here 20th of August,

The Scene of Floyd's Grave before the Removal of the Remains.



Near Fort Mandan, of Lewis and Clark.

Missouri River from Opposite Fort Clark, Showing Elm Point.

Indian Mounds above Bismarck, N. D. Site of Old Mandan Village.

Northern Pacific Bridge, Bismarck. Showing Site of Old Fort Abraham Lincoln at End of Distant Bluff.

1804, was fixed at the head of his grave." Two years later, on their return, the expedition found that the grave had been tampered with, presumably by Indians, and they rearranged it. In 1857 the Missouri had so washed away the bluff that the coffin projected, and some of the bones had fallen into the river. A reinterment took place, the new coffin being made from black walnut trees growing at hand.

On August 20, 1895, the ninety-first anniversary of his death, imposing ceremonies were held about Floyd's grave, and the place of interment permanently marked by a large stone slab suitably

inscribed. His remains were reinterred in two earthenware urns. The original place of interment is now entirely washed away.

On August 28th, Reed, the deserter, who had been brought in on the 18th, was tried, sentenced, and punished — leniently. He had "to run the gantlet four times through the Party and that each man with nine switches should punish him, and for him not to be considered in future as one of the Party."

They proceeded without mishap through the Sioux country, with which tribe they held a council, and their journey was enlivened with many interesting sights and experiences. It seemed at one time as if a conflict with the Teton Sioux was unavoidable, but it ended in an Indian feast and ball to the explorers.

** Indians Hunting the Bison.*

On October 13th, Private Newman was tried by a court-martial of "nine of his Peers" for "mutinous expressions," and sentenced to "seventy-five lashes and [be] Disbanded the party," and after dinner on the 14th they halted on a sand bar and executed sentence. Newman tarried with them, made himself very useful, and was virtually forgiven, but was not permitted to go beyond Fort Mandan.

October 21st they passed the Heart River. At this point are now the towns of Bismarck and Mandan, N. D., on either side of the Missouri River, joined by a costly steel bridge across which the Northern Pacific Railway trains run. Just below Heart River are the remains of Fort Abraham Lincoln, Custer's old post.

* From "Travels to the Interior of North America in 1832-3-4." By Maximilian, Prince of Wied, 1843.

† Captain Clark and His Men Building a Line of Huts.

* Bison Dance of the Mandans.

The weather now grew cold, snow fell, and they pushed along to reach winter quarters, among the Mandan Indians. They passed many old Mandan villages, and the Mandans themselves, clad only in their royal dignity and breech-clouts, were quite in evidence. October 26th they reached the Mandan towns, and two or three days were occupied in more or less ceremonial visits, which culminated in a council on the 29th.

FORT MANDAN.

In the meantime they were also seeking a suitable location for winter quarters. This was found on the east bank of the river, some six or eight miles below the mouth of Knife River and about four miles below the Indian towns. At this point they found heavy timber, from which they constructed their huts and stockade, Fort Mandan. They began felling trees on November 2d, moved into their cabins November 16th, completed them November 20th to 27th (accounts vary slightly), began building the stockade December 1st, completed the fortification December 24th, and the stars and stripes were hoisted over it for the first time on Christmas day, 1804.

* Interior of Hut of a Mandan Chief.

The timber used was mostly cottonwood and elm. The weather became very cold, the river froze over, and work was suspended for days at a time.

Lewis and Clark's description of their fort, which is practically duplicated by Gass, is as follows:

"This place, which we call Fort Mandan, is situated on a point of low ground, on the north [east] side of the Missouri, covered with tall and heavy cottonwood. The works consist of two rows of huts or sheds, forming an angle where they join each other; each row containing four rooms of fourteen feet square and seven feet high, with

* From "Travels to the Interior of North America in 1832-3-4." By Maximilian, Prince of Wied, 1843.

plank ceiling, the highest part of which is eighteen feet from the ground. The backs of the huts form a wall of that height, and opposite the angle the place of the wall is supplied by picketing. In the area are two rooms for stores and provisions. The latitude, by observation, is 47° 21′ 47″, and the computed distance from the mouth of the Missouri is 1,600 miles."

Here, some sixty miles above Bismarck and Mandan, were five villages of Mandans, Minnetarees or Grosventres, and Ahnahhaways or Hidatsas, ranging from the Knife River down to near Fort Mandan. In number there were probably more than 4,000 all told. The report speaks of them as about 1,000 men — warriors — strong.

These people cultivated the fields, had horses, lived in comfortable houses, and in a good hunting region. Their lodges were similar to those of the Arikaras', which are described by Gass as follows:

"In a circle of a size suited to the dimensions of the intended lodge, they set up sixteen forked posts five or six feet high, and lay poles from one fork to another. Against these poles they lean other poles, slanting from the ground, and extending about four inches above the cross poles; these are to receive the ends of the upper poles, that support the roof. They next set up four large forks, fifteen feet high and about ten feet apart, in the middle of the area, and poles or beams between these. The roof poles are then laid on, extending from the lower poles across the beams which rest on the middle forks, of such a length as to leave a hole at the top for a chimney. The whole is then covered with willow branches, except the chimney and a hole below to pass through. On the willow branches they lay grass and lastly clay. At the hole below they build a pen about four feet wide and projecting ten feet from the hut, and hang a buffalo skin at the entrance of the hut for a door. This labor, like every other kind, is chiefly performed by the squaws."

The winter passed pleasantly, although there was much cold weather. Much time was given to hunting — principally the deer, elk, and buffalo — a rendezvous hunting camp being established some thirty or forty miles below Fort Mandan, on the Missouri. Their hunting expeditions extended still farther south, even below Mandan and Bismarck. At the very point where the Northern Pacific Railway bridge spans the river, there was a buffalo ford in the olden time, and when the railway company located its bridge, their engineers merely followed the lead of the buffalo engineers.

A great change has taken place in the country since Lewis and Clark and the Mandans lived there. The few Indians there are left, are on a reservation farther west, at Fort Berthold; farms and towns, flocks and herds, dot the prairie where the Indians lived and hunted, and steamboats have succeeded the Indian canoes and Lewis and Clark's periogues.

*Winter Village of Minnetarees, in Lewis and Clark's time.

The remains of Indian villages are still to be seen. About ten miles above Bismarck one of these collections of mounds is found, on a bluff overlooking one of the most beautiful stretches of the Missouri, just below Square Buttes. There are eighteen or twenty of these mounds, most of them well defined, and generally more or less circular in form. They form a semi-circular arc, with the river as a chord, and are now more or less merged together into an irregular ridge. These mounds have been dug over and over, yet I was able to find among them many shards and arrow points and knives.

It is not possible that a vestige of Fort Mandan remains. On the return of the expedition in 1806, under date of August 17th, the Lewis and Clark itinerary says: "In reaching Fort Mandan we found a few pickets standing on the riverside, but all the houses except one, had been burnt by an accidental fire." [Coues, footnote.]

What the "accidental fire" left, the remorseless river unquestionably took long ago.

The character of the Missouri along here is well known for the rapid cutting of its banks. Both Lewis and Clark, and Gass give examples of this. A century has given ample opportunity for that one hut and those few pickets to have been insidiously undermined and carried away by the stream.

As I stood on the high bluffs of the river at this point and over-

*From "Travels to the Interior of North America in 1832-3-4." By Maximilian, Prince of Wied, 1843.

†Captains Lewis and Clark Holding a Council with the Indians.

looked the scene, I was profoundly impressed. To the north the distant valley of Knife River, deep green with heavy foliage, led down to the Missouri; to the south the rough, bluffy ground near me grew rougher and bluffier as it reached a big bend, and the irregular, grayish, ash-colored cut bank seemed like that of a prodigious railway cut; the great river, in a wide, swollen flood, rolled on as it did a hundred years ago, and in broad, massive curve swept around a low point on the opposite shore, when, in a mood of inconstancy, it whirled back again in the other direction, and, as sure as fate, there is that "bluff of coal" mentioned by the explorers,

†*Captain Clark and His Men Shooting Bears.*

standing out strong and plain as a guide to us. Those were the limits — the "bluff of coal" to the south, the Knife River to the north, and between them were the old Mandan villages, now gone for aye.

There extends for one and one-half or two miles a flat, heavily timbered bottom — Elm Point it is now called, and down at the lower end of it was where old Fort Mandan stood, and with our glasses we can make out, on the opposite shore, all that is left of Fort Clark, a trading post built after Lewis and Clark's time and of which but a trace remains.

No large timber can be seen for a half mile or more at the lower end of Elm Point, and I am told that most of the timber in the bottom is now elm, hence the name of the point. The illustrations, from photographs taken under disadvantages, will indicate something of the topography at the present time.

Through Mr. Joseph H. Taylor of Washburn, N. D., a resident and editor in the country, we knew it was useless to search for relics, and the overflowed bottom would otherwise have prevented.

An interesting description is found in Lewis and Clark's journal, of the Mandan and Arikara method of glass bead manufacture, which knowledge these Indians obtained from the Shoshones.

UP THE MISSOURI RIVER.

Early in April, 1805, preparations were begun for their departure from Fort Mandan. Boxes were packed with curios and specimens

Lewis and Clark's Route. Bismarck — Mouth of Yellowstone River.

of various sorts collected during the winter, which were to be forwarded to President Jefferson. Among these were a pair of stuffed antelopes, skins of the white weasel, red fox, yellow bear, white hare, and marten; mountain sheep and elk horns; articles of Indian dress, and a few live specimens of squirrels, magpies, etc.

The batteau returned to St. Louis accompanied by thirteen persons, all told, ten of them attaches of the expedition.

The number continuing up the river was thirty-two, embarked in "six small canoes and two large periogues." The canoes had been made during the winter from large trees.

Late in the afternoon of April 7, 1805, both parties bade farewell to Fort Mandan and to each other, and started on their respective journeys, one to home and civilization, the other out into the unknown. April 11th the explorers left behind the last of their Indian friends, and on April 13th they saw large flocks of swans and geese, the latter causing comment from the fact that they nested in the tops of high trees.

It is a singular fact that, after leaving the country of the Man-

dans, although the expedition passed through the territory of several

Crooked Fall (just below Rainbow Fall).

Missouri River, Looking Down Stream from the Great Fall.

presumably hostile Indian tribes, they never saw an Indian until they reached the Continental Divide near the head waters of the Columbia—Lemhi—River.

On April 26th they reached the mouth of the river known among the French and Indians as the Roche Jaune or Yellow Rock. Lewis and Clark rendered this into English as *Yellow Stone*, and as

Rainbow Fall, Missouri River. Colter Fall in Distance.

Great Falls of the Missouri.

Rock Point at the Right below the Falls is Where Captain Lewis Wrote His Description.

the Yellowstone River it stands to-day, together with its derivatives, Yellowstone Valley and Yellowstone Park. May 8th they passed Milk River, and on June 2d camped at the mouth of Maria's River, named by Captain Lewis after a cousin of his, Miss Maria Wood. He

Black Eagle Fall, in its Natural State, when Lewis and Clark Saw it.

Black Eagle Fall in 1900.

says: "I determined to give it [the river] a name, and in honor of Miss Maria W——d called it Maria's River. It is true that the hue of the waters of this turbulent and troubled stream but illy comport with the pure celestial virtues and amiable qualifications of that lovely fair one; * * *" The gallant captain was human, and set a fashion that many explorers and geographers have since followed. The river is now charted as Marias.

At this point they were greatly perturbed as to which direction to take — follow the Maria's River, which ran from the northwest, or the other stream, from the southwest. They were *making* geography, and in the scant knowledge of that day it was a serious matter to decide which of these streams was the true Missouri. The northern branch was the narrower but deeper stream.

They spent several days in examining both streams, Gass and two

Lewis and Clark's Route. Mouth Yellowstone River — Great Falls.

men being the first, from his account, to ascend the true Missouri above this point. This examination, however, only confused them the more.

Finally, both Lewis and Clark concluded, tentatively, that the southern branch was the main stream, but all of their men thought differently. They here *cached* some of their supplies and heavy luggage and one of the periogues, and on June 11th Captain Lewis and four men set out in the van, up the southern branch. Captain Clark and the remainder of the company followed leisurely.

That afternoon Captain Lewis, who was suffering from dysentery, became seriously ill and was compelled to encamp. Having no medicines with him, he took some chokecherry twigs and boiled them, making "a strong, black decoction of an astringent, bitter taste." At sunset he took a pint of the liquid, and drank another pint an hour afterward. This produced the desired effect, and in the morning he was quite well. This incident shows into what emergencies they were sometimes thrown and how successfully they met them. On June 13th the doubt as to the true course of the Missouri was dispelled. That day Lewis reached the Great Falls of the Missouri, and on June 16th the main party reached the mouth of Portage — Belt Mountain — Creek, below the falls.

THE GREAT FALLS OF THE MISSOURI.

We have now reached what may be termed an epoch in the progress of the exploration. They have met their first real difficulty, and in some way it must be overcome.

Captain Lewis had, previous to Clark's arrival, carefully examined the entire succession of falls and cascades found here, and had seen that a portage was an absolute necessity. Indeed it was with great exertion that they were able to navigate the river to the mouth of Portage Creek. On the 15th, Gass says: "We proceeded on as usual, but had the most rapid water I ever saw any craft taken through." Captain Clark carefully surveyed and staked out a portage line on the east or "south" bank, which measured more than seventeen miles. In order to lighten the work, they searched for trees large and round enough from which to make wheels to place under their periogue and canoes, so that they could be dragged across the plain. They, luckily, found *one* cottonwood tree below Portage Creek, measuring twenty-two inches in diameter, which answered the purpose.

The portage occupied the time of most of the party from June 21st to July 2d, and was fatiguing work in the extreme. The axles and tongues of the so-called "waggons" were weak and some of them broke. The vehicles had to be dragged by hand across an uneven country, where the prickly pear abounded, and the buffalo had so tramped the wet earth that it had dried into hard, sharp points, so that, being in their moccasins, the men's feet suffered greatly.

Yet there was no complaining. The plains were, at first, covered with thousands of buffalo, and the hunters kept the party well supplied with fresh, nourishing meat.

The bears were numerous and savage, and attacked the men upon all occasions. Captain Lewis at one time plunged into the river to escape from a bear, and there were several other narrow escapes. At another time a terrible hailstorm nearly caused fatalities, and a cloudburst, pouring down through a ravine in which Captain Clark and others had taken refuge, nearly overwhelmed the entire party, which included the negro York, and Sacajawea the Indian woman and her pappoose.

If the region about old Fort Mandan has been much changed since Lewis and Clark wintered there, the reverse is true of this spot. The geological conditions are radically different, and, save as the city of Great Falls and its smelters are now to be found here, there is, with one exception, practically no change.

Beginning below Portage Creek, there is a constant succession of rapids and falls to the mouth of Medicine — Sun — River, where the city of Great Falls now stands. In this distance of twelve to fifteen miles there are four principal falls, besides several

smaller ones. The total fall of the river between the first rapid and the foot of the Great Fall is, by recent measurements, somewhat more than 400 feet. The heights of the larger falls, as given by Lewis and Clark, are: Black Eagle, 26 feet; Rainbow, 48 feet; Crooked, 19 feet; Great, 87 feet. In addition, there are several from four to ten feet in height. I believe these figures are not those used at the present time, but they are close to the truth.

Lewis and Clark knew of these falls through the Indians, and are supposed to have been the first white men to see them, or at least to publicly describe them. Lewis' discovery was rather a dramatic one. At a distance of seven miles, he first heard the sound of them, then saw a column of spray. Hastening toward it, he became certain from the increasing thunder of the cataract that he was near the Great Fall of the Missouri. He describes it as follows:

"The hills were difficult of access, and 200 feet high; down these he hurried with impatience, and seating himself on some rocks under the center of the falls, enjoyed the sublime spectacle of this stupendous object, which since the creation had been lavishing its magnificence upon the desert, unknown to civilization.

"The river, immediately at its cascade, is 300 yards wide, and is pressed in by a perpendicular cliff on the left, which rises to about 100 feet, and extends up the stream for a mile; on the right the bluff is also perpendicular for 300 yards above the falls. For ninety or a hundred yards from the left cliff, the water falls in one smooth, even sheet, over a precipice of at least eighty feet. The remaining part of the river precipitates itself with a more rapid current, but, being received as it falls by the irregular and somewhat projecting rocks below, forms a splendid prospect of perfectly white foam, 200 yards in length and eighty [feet] in perpendicular elevation. This spray is dissipated into a thousand shapes, sometimes flying up in columns of fifteen or twenty feet, which are then oppressed by larger masses of the white foam, on all which the sun impresses the brightest colors of the rainbow. As it rises from the fall it beats with fury against a ledge of rocks, which extends across the river at 150 yards from the precipice. From the perpendicular cliff on the north, to the distance of 120 yards, the rocks rise only a few feet above the water; * * * between them and the perpendicular cliff on the south the whole body of water runs with great swiftness. A few small cedars grow near this ridge of rocks, which serves as a barrier to defend a small plain of about three acres, shaded with cottonwood, at the lower extremity of which is a grove of the same tree, where are several Indian cabins of sticks; below the point of them the river is divided by a large rock, several feet above the surface of the water, and extending down the stream for twenty yards. At the distance of

300 yards from the same ridge is a second abutment of solid perpendicular rock about sixty feet high, projecting at right angles from the small plain on the north for 134 yards into the river. After leaving this, the Missouri again spreads itself to its usual distance of 300 yards, though with more than its ordinary rapidity."

The captain was "disgusted with the imperfect idea" of his description, but it is exceedingly accurate, even to this day. I sat on an eminence on the east — Lewis' south — side of the stream for an hour, studying the scene with a copy of Lewis' description in my hands. I overlooked the entire fall and a long stretch of river below. There was the ledge of rock stretching across from the west — north — bank, on the high rock at the extremity of which Lewis sat and penned his description; just back of the ledge still can be seen the cottonwood plain, and yet farther down is the "second abutment of solid perpendicular rock." If Lewis could reseat himself there to-day he would scarcely have to change his writing an iota. The rocks hold the river level, and there is but slight erosion.

The Rainbow Fall also greatly impressed Lewis. To me, the Great Fall, although the highest, was less interesting, in some respects, than either the Crooked or Rainbow Falls. The former runs in all directions, up stream, down stream, sideways, lengthways — and *every other way*. The latter is a dignified, noble cataract extending clear across the stream in the most regular form of any of them. It can be viewed full in front or in profile, as the fall is at the head of a bend.

The Black Eagle Fall derived its name from the fact that on an island at the foot of the fall, "on a cottonwood tree, an eagle had fixed her nest, and seemed the undisputed mistress of a spot, to contest whose dominion neither man nor beast would venture across the gulfs that surrounded it. * * * "

In July, 1860, Capt. W. F. Raynolds, United States Engineer Corps, was at this point, and referring to this spot says: "A remarkable fact is that the eagle's nest, described in 1805, * * * still remains in the cottonwood, on the island, in the stream, and as we came within sight a bald eagle of unusual size was perched in the tree by its side, * * * and from its known longevity it may have been the identical eagle that Captain Lewis made historical more than half a century ago."

In 1872 Thomas P. Roberts, making a reconnoissance of the Upper Missouri River, was here, and reports this incident:

"On a little island below these falls — Black Eagle — stands a portion of a large cottonwood tree, the top apparently having been blown off. Among the branches still remaining is a black eagle's nest. When I first approached the place, riding, * * * an old eagle sailed out directly toward me and soared immediately over my

head. * * * It alighted on a jutting rock within a hundred feet of me. * * * As I had a good opportunity to judge the age of the bird, his feathers being soiled, torn, and otherwise old looking, I came to the conclusion that probably he was the same eagle * * * seen by Lewis and Clark in 1805."

Interesting coincidences to say the least.

The island, tree, and bird are gone now. Civilization has wrought its perfect work, and a dam, power-house, footbridge, and a huge smelter have usurped the eagle's erstwhile stronghold.

The "large fountain boiling up underneath the rocks," of "a bluish cast," mentioned in the explorers' journal, is still in full flow. It is to-day as wonderful a sight as it was in 1805.

End of Portage of Lewis and Clark at White Bear Islands.

White Bear Islands, Looking Across Stream. This Overlooks Site of Lewis and Clark's White Bear Island Camp.

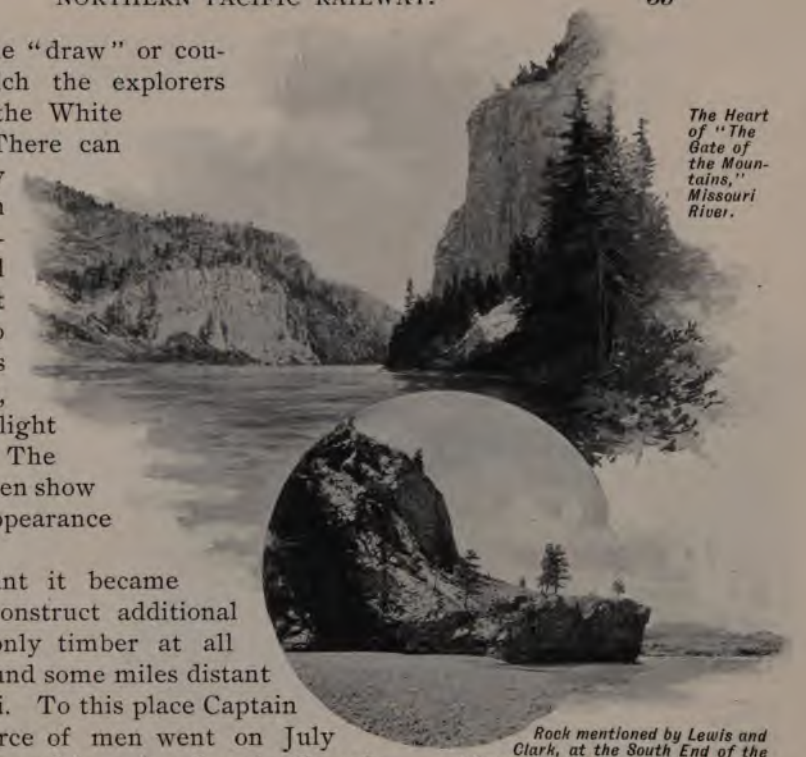
White Bear Islands. Above Series of Falls of Missouri River just above Medicine (Sun) River, Looking Up Stream.

WHITE BEAR ISLANDS—GATE OF THE MOUNTAINS—THREE FORKS OF THE MISSOURI.

The camp of the expedition at the end of their portage was opposite three islands. This camp and the islands are known in the annals of the party as *White Bear*, because these animals were so numerous thereabout and were found on the islands. I understand the white bears are still to be found in this part of Montana.

Through the kindness of Mr. Paris Gibson, the "father" of the flourishing city of Great Falls, I was enabled, without loss of

time, to find the "draw" or coulee down which the explorers descended to the White Bear camp. There can hardly be any mistake made in the identification of this old roadway, for it naturally, so to speak, identifies itself. There has, I take it, been slight change here. The illustrations given show the present appearance of the spot.



The Heart of "The Gate of the Mountains," Missouri River.

Rock mentioned by Lewis and Clark, at the South End of the "Gate of the Mountains."

At this point it became necessary to construct additional canoes. The only timber at all suitable was found some miles distant up the Missouri. To this place Captain Clark and a force of men went on July 10th, being followed in a few days by Captain Lewis and the remainder of the party. On July 15, 1805, the regular journey was resumed. As they now expected to meet the Shoshone Indians at any time, a party proceeded by land also, led by one of the captains. They soon reached the mountains, and their passage through them impressed them profoundly. "For five and three-quarter miles these rocks rise perpendicularly from the water's edge to the height of nearly twelve hundred feet; * * * the rocks approach the river on both sides, forming a most sublime and extraordinary spectacle; * * * nothing can be imagined more tremendous than the frowning darkness of these rocks, which project over the river and menace us with destruction," are some of the expressions used.

One of the most enjoyable river rides I ever took was my ride through this glorious canyon, the "Gates of the Rocky Mountains" of Lewis and Clark, with Messrs. Hilger and De Camp, in a flat-bottomed rowboat. We went in the contrary direction from the one the explorers did, and were impressed, as they were, by the great heights and the magnificent panorama that unfolded itself.

We could follow their description easily. The "high rock in a bend to the left," where they emerged, is just as high to-day as it was then; the spot where they encamped "after dark," in the heart of

the canyon above an island, is a beautiful camping ground now, above which the gray canyon walls rise in herculean proportions; vaults, domes, and pinnacles.

The mysterious explosions in the mountains here heard by Lewis and Clark, like unto artillery firing, I am told are still to be heard.

This canyon is now a pleasure resort for the people of Helena, some eighteen miles distant. At its entrance Mr. Hilger has a fine ranch and a little steamer that makes excursion trips through the canyon, and the casual visitor to the capital of Montana should not fail to enjoy this great treat. Lewis and Clark say: "At a mile from the Gates a large creek * * * empties behind an island,* * *" to which they gave the name Potts, after one of their men. Doctor Coues identifies this with Big Prickly Pear Creek farther along. The island is there, and *the creek is there*, just as Lewis and Clark state, even if the maps do ignore it, and it is *not* Big Prickly Pear Creek either.

Along the Missouri River between "Gate of the Mountains" and "Three Forks."

If the Doctor had visited Hilger's Ranch when he was in Helena the mystery would have been explained. Just below Hilger's house a magnificent spring bursts from the ground and pours forth an enormous quantity of water that, as it flows into the Missouri, is a large stream, as Lewis and Clark say. As it doesn't run for more than a quarter of a mile at the outside, and does *not* extend up the valley, the cartographers naturally do not plat it. But such as it is, it *is* there, and the explorers were misled by its appearance at the river.

If they did not see Big Prickly Pear Creek, neither did they discover Multnomah River later on, although twice passing it.

The expedition is now nearing a beautiful spot — the Three Forks of the Missouri. For more than a hundred miles here, along the banks of the main stream and the Jefferson Fork, Lewis and Clark's trail is paralleled by the rails of the Northern Pacific Railway, and towns, villages, and ranches are found where solitude then reigned. Beyond the wide expanse of the Missouri Valley, after leaving the Gates of the Mountains, the mountains close in again and form the Canyon of the Missouri, which extends in varying width, and with

fine walls richly colored, clear to the Three Forks. Near the afterward well-known Confederate Gulch, Sacajawea, after years of captivity among alien tribes, like McGregor, found herself on her native heath again, greatly to the delight of the party.

On July 25th, Captain Clark, with Chaboneau and others, now in advance and afoot, reached the Three Forks, and after a short halt proceeded up the Jefferson for twenty-five miles. Clark was worn out and sick; Chaboneau was "unable to proceed any further," and they camped. The sharp stones and the prickly pears had cut and blistered their feet, and they deserved a rest. On July 27th the main party reached the forks, and on a beautiful spot on the Jefferson just above them they camped and remained until July 30th. Their camp was at the spot where Sacajawea and her tribe were encamped when she was captured by the Minnetarees.

The entire party were impressed with the scene at this point. Others have since been. The wide spreading valleys of three large streams, expanding fan-like as they retreat to the horizon and presenting a grassy, timbered expanse, with snow-tipped mountains far beyond, will challenge anyone's admiration.

A careful examination of the three streams was made, and they were much perplexed as to how to proceed in the matter of nomenclature. The streams are, to the casual eye, of about the same size, and it is perhaps not surprising that Lewis and Clark gave to each of them a new name, above the junction, especially as their measurements showed little difference in their relative volume.

The result of their deliberations, made known August 9th, was to consider the western branch as probably the largest stream, and to this was given President Jefferson's name; the middle fork was named after Secretary of State Madison, and the eastern branch was called Gallatin, in honor of the Secretary of the Treasury.

Temporary Sweatbath House and Indians Cooling Off.

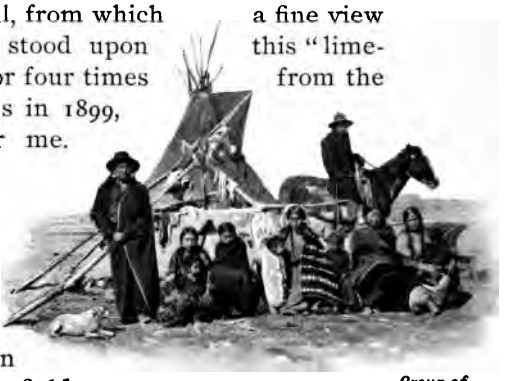
Their manner of applying names was, almost invariably, in the possessive; these rivers became, therefore Jefferson's, Madison's, and Gallatin's rivers. The possessive form was long since discarded.

The journal says: "Between these two forks — Gallatin and Madison — and near their junction with that from the southwest, is a position admirably well calculated for a fort. It is a limestone rock of an oblong form, rising from the plain perpendicularly to the height of twenty-five feet on three of its sides; the fourth, toward the middle

1. *The "Fort Rock" of Lewis and Clark.*
2. *Looking Up the Gallatin River at Three Forks.*
3. *Madison and Jefferson Rivers.*
4. *Looking Up the Valleys of the Madison and Jefferson Rivers.*
5. *Jefferson Canyon, Jefferson River.*

Three Forks of the Missouri River.

fork, being a gradual ascent, * * * with a fine greensward, * * * level, and contains about two acres." In a footnote on this, Doctor Coues suggests, very naturally, that here is where Manuel Lisa built his well-known fort, in 1808, since washed away by the Madison. Lisa's fortification, which Mr. Peter Koch of Bozeman informs me *is* undoubtedly destroyed, was a short distance south of this spot, which is an exceedingly prominent hill, from which a fine view is obtained over the three valleys. I stood upon this "limestone rock" in 1898, and saw it three or four times from the car windows of Northern Pacific trains in 1899, when it was also photographed for me. Judging from the explorers' notes, there has been little change in this immediate locality since 1805. Farther up the valleys it is quite different. Farms and towns are more abounding there, and the white man pastures his sheep, horses, and cattle on the bottoms and hills, and cultivates the fields. Many mining centers are found, and the mountains are yielding up their riches.



Group of Flatheads (Ootlashoots).

ACROSS THE CONTINENTAL DIVIDE.

July 30th the party resumed their journeying, up the Jefferson, naming many of the side streams after their men, and others after various attributes that Lewis supposed Mr. Jefferson possessed in remarkable degree, as witness: "I called the bold rapid an [and] clear stream, *Wisdom*, and the more mild and placid one which flows in from the S. E., Philanthrophy, in commemoration of two of those cardinal virtues, which have so eminently marked that deservedly selibrated character through life." Philosophy River had already been named after another attribute of "that illustrious personage, Thomas Jefferson."

These three rivers, the Wisdom, Philanthropy, and Philosophy, are now charted as the Big Hole, Ruby or Stinking Water, and Willow Creek.

Progress up the Jefferson and its continuation, the Beaverhead, as it is now known above the Big Hole and Ruby rivers, was rather slow and laborious as the river became shallower.

Captain Lewis and several men marched by land as scouts, hoping to meet the Indians and procure horses.

August 11th Lewis saw an Indian, but was not able to overtake him, nor was it until the 13th, after they had passed the Continental Divide, that they did find a band of natives.

They were kindly received and smoked the pipe of peace together.

Sacajawea and her spouse Chaboneau were with the canoe party under Captain Clark. As they drew near the Two Forks, or Shoshone Cove, as they termed the mountain valley just above the forks, the squaw began to dance and point ahead. Captain Clark then saw the Indians, with Captain Lewis, approaching.

The Clearwater River, Idaho.

On the Head Waters of the Clearwater River.

An Oldtime Cabin on South Fork of Clearwater River.

Heart of the Bitter Root Mountains.

An Indian woman drew near, who, recognizing Sacajawea, the two embraced most affectionately. She was a former companion captive, taken at the time that Sacajawea had been, but had escaped and returned to her own people. In the council which followed, Sacajawea began to interpret, when she discovered that the chief, whose words she was translating to the explorers, was her own brother. An affecting scene, that came near to breaking up the council, occurred. The poor squaw evidently rejoiced at being again among her kith and kin. Her own relatives were nearly all dead.

On August 17th the whole party were united and with the Indians, at the junction of the Red Rock, or southeastern, and the Beaverhead or western, branches of the Jefferson River. At this point the expedition was about seventy-five miles a little west of south from where Butte, the greatest mining camp in the world and a city of 50,000 people, now stands. The waters of the Upper Wisdom or Big Hole River are now carried in a flume and canal over the divide to Butte.

Through the kindness of the Shoshones, horses were obtained, and having cached their canoes and some supplies they proceeded across the mountains — Bitter Root — via Lemhi Pass (which should be called Lewis and Clark's Pass) to the Indian encampment, on the head waters of the Columbia River. In a short time it was ascertained, after a thorough and heart-breaking reconnoissance by Clark, that the descent of the Columbia — Lemhi and Salmon and Snake — was absolutely impossible, either by canoes or horses.

They had now reached the *crucial period* of the journey. Were they defeated or repulsed? Their supplies were low, they themselves exhausted, and a fearful range of mountains surrounded them.

Ross' Hole. Looking North.

The squaw Sacajawea had proved a valuable acquisition to the explorers. Here they procured another Indian, a guide, equally valuable. An old man, thoroughly conversant with the country, had guided Clark down the Salmon River, and now agreed to lead them northward to try the northern Nez Percé trail.

On August 30, 1805, they were again ready to proceed. Their route now was entirely by land trail, and a rough one it proved to be. They had obtained from the Shoshones twenty-nine horses, not quite one for each person. The old Indian guide led them down the Lemhi River to below where it changes its name to Salmon, and thence north and over a terribly rough mountain country, across a part of which they had to cut their own trail, on to the head waters of the Bitter Root River, or as they then called it, Clark's River, to a valley, now known as Ross' Hole.

Ross' Hole is a beautiful park spot about two miles long by a

Lewis and Clark's Route. Great Falls — Bitter Root Range and Return.

mile in width, some thirty miles above and south from Grantsdale, the terminus of the Bitter Root Valley branch of the Northern Pacific Railway. It is right in the angle formed by the main Bitter Root Range and a spur of the Rockies, extending northeastward toward Anaconda. Sula is its post office, and there are several families living there and on Ross' Fork and affluent creeks.

At this point they met the first members of an Indian tribe whose virtues and unwavering fidelity and friendliness to the whites seem almost like fiction. Lewis and Clark knew them as Ootlashoots; we know them as Flatheads, more correctly, Selish or Salish. The term Flathead, applied to *them*, is a horrible misnomer, apparently without foundation in fact. The Indians' reception of the party was cordial and friendly to a degree. The explorers' account of it is rather brief. Learning from Major Catlin, of Missoula, that I could obtain from an old and reliable Indian, François, on the Flathead Reservation, the Indian story of this meeting, I wrote my friend Father Daste, a priest who has been long in the country, at St. Ignatius Mission, and asked him if he could obtain the story for me. With a change here and there, I let Father Daste tell the story in his own words.

"ST. IGNATIUS MISSION, Sept. 5, 1899.

"I had three days ago the chance to see, at the agency, the old Indian, François Saxà, and asked him to tell me what he had heard the old Agnes, the wife of Chief Victor and stepmother of Charlos, relate about the first meeting of the Flathead Indians and the explorers, Lewis and Clark. You know that this man, François, while living in Bitter Root Valley, enjoyed the enviable reputation among the settlers of being a truthful man, on whose words they could always depend. He said he remembered very well what the old Agnes related to the Indians about that historical meeting.

"The Flathead Indians were camping at Ross' Hole, or Ross' Fork, at the head of Bitter Root Valley, when one day the old chief, *Three Eagles*, the father of Chief Victor and grandfather of Charlos, left the camp to go scouting the country, fearing there might be some Indian enemies sneaking around with the intent to steal horses, as it was done then very frequently. He saw at a distance Lewis and Clark's party, about twenty men, each man leading two pack horses, except two, who were riding ahead, who were Lewis and Clark. The old chief, seeing that these men wore no blankets, did not know what to think of them. It was the first time he had met men without blankets. What kind of beings could they be? The first thought was that they were a party of men who, traveling, had been robbed by some Indians

Nez Perces of the Present Day.

Lolo Creek (Travelers Rest).

of their blankets. He went back to his people and, reporting to them what he had seen, he gave orders that all the horses should be driven in and watched, for fear the party he had seen might be on a stealing expedition. He then went back toward the party of strange beings, and, hiding himself in the timber, watched them. When they came to the open prairie he noticed that they traveled slowly and unconcerned, all together, the two leaders going ahead of the party and looking around, as if surveying the country, and consulting with their men. He thought within himself: These must be two chiefs; but what can they be after? To make things more complicated for the old chief there was a colored man in the party. What can this man be? When the Indians were going to the buffalo hunt they had a custom, if any sign would appear of some of their enemies being hiding around, to have a *war dance* to encourage one another to fight and be brave. For this dance the Indian warriors would paint themselves, some in red, some in yellow, and some in black, etc., and from the color each had chosen to paint himself his name was called. This black face, thought the old chief, must surely be a man who painted his face black in sign of war. The party must have had a fight with some hostile Indians and escaped from their enemies, losing only their blankets. Seeing that the strangers were traveling in the direction of his camp, the old chief went back to his people and told them to keep quiet and wait for the party to come near. From the easy and unconcerned way the strange beings were traveling, the Indians inferred that they had no intention to fight or to injure them. Hence, when they saw the strangers advancing, in the same manner, toward them, and were already near their camp, the Indians did not move, but kept watching. When the two leaders of the party, coming to the Indian camp, showed friendship to the Indians, there was a universal shaking of hands. The chief then gave orders to the Indians to bring in the best buffalo hides, one for each man to sit on, and the best buffalo robes also, one for each man to use as a blanket. Then the two

Old Lewis and Clark Trail at Lolo Hot Springs, still used.

leaders, observing that the Indians were using, for smoking, the leaves of some plant, a plant very much alike to our tobacco plant, asked for some and filled their pipes; but as soon as they tried to smoke, they pronounced the *Indian tobacco* no good. Cutting some of their tobacco they gave it to the Indians, telling them to fill their pipes with it. But it was too much for them, who had never tried the American weed, and all began to cough, with great delight to the party. Then the two leaders asked the Indians for some Kinnikinnick, mixed it with the tobacco, and gave again to the Indians the prepared weed to smoke. This time the Indians found it excellent, and in their way thanked the men whom they now believed a friendly party. On their side the whites, seeing the friendly dispositions of the Indians, decided to camp right there, and they began to unpack their horses, giving the Indians to understand that they also had blankets in their packs, but that they used them only to sleep in, and gave them back the robes. The Indians were soon out of their wits when they saw some of the men packing on their shoulders pretty good sized logs for their camp fires, and conceived a great idea of the power of the white man. All went on friendly, and after three days they started off, directed to Lolo Fork's trail by the Indians, as the best way to go the Nez Perces' country.

"I am, yours respectfully, J. DASTE, S. J."

This account appears to agree well with what the explorers state, and is interesting as giving the Indians' view of the event.

The expedition obtained additional horses from the Selish, and then, leaving Ross' Hole, crossed the mountains into the main Bitter Root Valley, down which they journeyed to Travelers Rest — now Lolo — Creek, which they reached on September 9th, and where they remained until September 11th.

Travelers Rest was quite an important point in the expedition, as will be seen later. It was about twelve miles south from Missoula on the main line of the Northern Pacific, near a station on the Bitter Root branch now known as Lou-lou.

The journals of both Lewis and Clark, and Gass unite in pronouncing this a very poor valley — the "soil poor and gravelly." That poor, rocky, gravelly soil produces the finest of fruit. The valley is now well peopled, and the Bitter Root branch of the Northern Pacific Railway does an enormous business in hauling timber, fruits, hay, etc., to the mining camps of Idaho and Montana.

Leaving Travelers Rest, the explorers followed the creek of that name, now known as Lolo Creek, to its head in the region about the Lolo Pass of the Bitter Root range. They were again to try conclusions with this truly terrific maze of mountains, try to force a passage where Nature seems to have said "thus far and no farther."

They followed the creek bottom part of the way, but were forced

Needle Rock, Lolo Hot Springs.

to the mountains, making it an arduous passage on the whole. Upon reaching the Hot Springs, a few miles below the Continental Divide, the old guide lost the trail for a time. After finding it they pushed forward, and crossed the divide without particular difficulty. From September 14th to 22d, inclusive, they were badly tangled up, among the mountains. While they were not absolutely beaten back, as they were on the Salmon River, their progress was very slow, and made under almost incredible difficulties. Along their route there was little game, they killed their horses for food, their pack animals wandered, and some of them were abandoned or lost; the trail was a terrific one; the weather cold, with rain or snow, and they were ahungered more than once. Yet they pushed on with grim determination, and finally worked clear of the mountains and found a haven among the Chopunnish or Nez Percé or Pierced Nose Indians, where all speedily became sick because of the change to a root diet. After satisfactory powwows with the

Birdseye View Lolo Hot Springs, from Needle Rock.

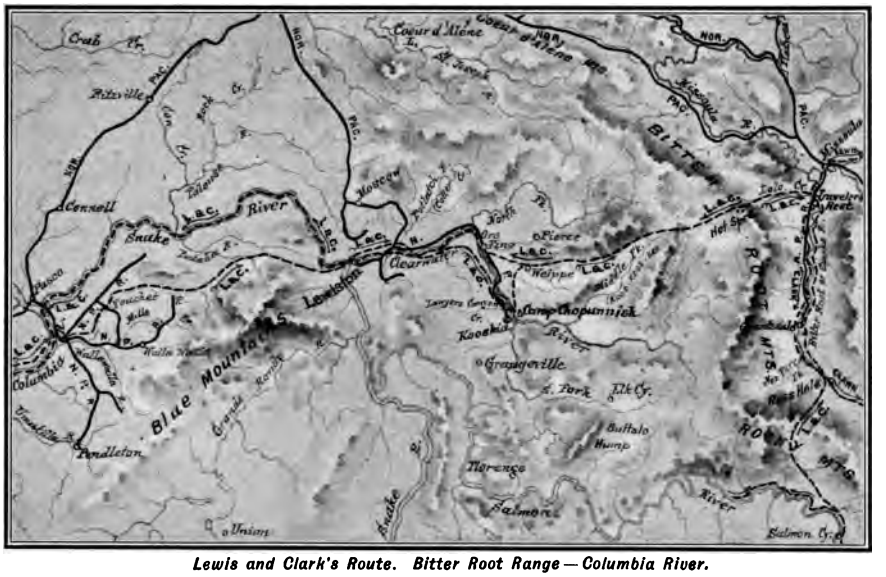
Old Trail Leading from Glade Creek to Colt Killed Creek across the Mountains. Not Used Now.

Two Miles Below Lolo Springs. Lewis and Clark Camped about Here.

Northern Pacific Railway Party in Camp at Glade Creek. Old Trail Runs alongside the Tent.

Indians they established a camp at the forks of the Koos-koos-kee — Clearwater — where they constructed log canoes to transport them down the Koos-koos-kee, the Lewis — Snake — and the Columbia rivers to the ocean.

The region in which the explorers now found themselves is to-day, as it was then, the home of the Nez Percé Indians. With, I think, but one exception, these royal representatives of the red men have always proved as friendly to the whites as Lewis and Clark found them. That exception was in 1877, when from the general region of Lewis and Clark's Camp Chopunnish of 1806, Chief Joseph began the Nez Percé war.



Lewis and Clark's Route. Bitter Root Range — Columbia River.

Now these Indians have their lands in severalty, and their farms extend all along the Clearwater and its affluent streams, and occupy the fertile plateaus high above them. As useful and respectable members of "society" they average much above the ordinary Indian.

This section is now quite well settled by whites, too. Lewiston, at the junction of the Clearwater and Snake rivers, is one of the wealthiest places of its size in the country. Clarkston, on the Snake River, opposite Lewiston, is a new town with prospects. Oro Fino, Pierce City, and Weippe, not far from where Lewis and Clark made their canoes, are prosperous towns. South from Lewiston are Grangeville, Florence, Elk City, and other mining towns, and surrounding them are rich, perhaps phenomenally rich, mining districts, of which Buffalo Hump is the most prominent one. Out of this region, since the early '60s, have been taken more than $100,000,000 of gold.

The plateau agricultural lands are remarkably rich, averaging

forty to sixty bushels per acre for wheat. Both the plateau and bottom lands are developing into one of the choicest fruit regions in the United States.

North, in the country drained by Colter Creek, or the Potlatch River, one will now find vast areas of wheat fields, and interspersed among them paying fruit ranches. The towns lie thick there also, and Spokane, 144 miles from Lewiston, is the seat of empire. And Lewis and Clark had lived on dried camas roots and dried salmon.

Jefferson Medal. Given to a Chief by Lewis and Clark.

Reverse of Jefferson Medal.

DOWN THE COLUMBIA.

On October 7, 1805, the party, physically much stronger, started upon the last stage of their outbound journey. Their horses, numbering thirty-eight, were branded and placed under the care of two Indian brothers and another Indian, the son of a chief, until they should return for them. Their canoes were, after the fashion of the red men, burned out of trees, and proved fairly equal to the task of navigating the rapids and eddies of the Columbia.

On October 8th, they passed a large creek on the right, to which they gave the name of Colter, after John Colter, heretofore referred to. This creek, like so many streams and objects named by Lewis and Clark, has lost that name and is now known as the Potlatch River. The Spokane-Lewiston branch of the Northern Pacific Railway follows the stream for some distance and to its junction with the Clearwater River, and then continues down the left bank of the latter to Lewiston.

From the mouth of the Potlatch, the Clearwater extension of the railway follows the right bank of the Clearwater up that river beyond the farthest point reached by Lewis and Clark.

Just beyond the mouth of the Potlatch, when grading for the railway embankment, it became necessary to cut through the nose or end of a hill spur. Unexpectedly, an Indian grave or two was uncovered. Almost immediately, Mr. Lester S. Handsaker of Mr. Andrew Gibson's engineering corps, located at the spot, discovered this fact, and at once, March 1, 1899, began an examination of the graves. Beads, brass and copper ornaments, arrowheads, knives, hatchets, an old flintlock musket, a sword, etc., were brought forth, the metallic articles greatly rusted and decayed. An old hatchet

given the writer by Mr. Handsaker has the handle entirely gone, and a bayonet is rusted to probably one-half its original size. Mr. Handsaker, in his rummaging, found something carefully wrapped in many thicknesses of buffalo hide. Unwrapping it, he uncovered one of the *Lewis and Clark medals of the Jefferson medallion grade.* This proved that the grave from which it was taken was that of a chief. The captain had distributed several of the medals — of the three grades — to chiefs in this vicinity and along the Snake River. In Governor I. I. Stevens' report on the Pacific Railroad surveys occurs a passage in reference to one of these same medals. George Gibbs, in his report to Capt. Geo. B. McClellan — General McClellan afterward — who had charge of a branch of Stevens' work, under date March 4, 1854, says: "At the crossing of the Snake River, at the mouth of the Peluse [Palouse], we met with an interesting relic. The chief of the band, Wattai-wattai-how-lis, in coming to visit Captain McClellan, exhibited, with great pride, the medal presented to his father, Ke-powh-kan, by Captains Lewis and Clark. It is of silver, double, and hollow, having on the obverse a medallion bust, with the legend, 'TH. JEFFERSON, PRESIDENT OF THE U. S., A. D. 1801,' and on the reverse the clasped hands, pipe, and battle-axe, crossed, with the legend, 'PEACE AND FRIENDSHIP'." This well describes this grade of medal. The medallion portrait is of Jefferson, of course, and the medal is two and one-eighth inches in diameter. The one found at the Potlatch, when I saw it, bore slight traces of its long entombment.

At Mouth of Potlatch River (Colter Creek).

Looking Up the Clearwater (Koos-Koos-Kee) from the Mouth of the Potlatch. ★ Showing also Chief's Grave from which Medal was Taken.

Doctor Coues mentions two other medals found, one at Fort Clatsop, and the other at the mouth of the Wallawalla River.

At the mouth of the Potlatch, Neeshnepahkeeook had his village, and in the vicinity were the villages of Weahkoonut, Hohastilpilp, and Tunnachemootoolt. To each of these chiefs a medal of some sort was given.

The party's progress down the river was punctuated by a canoe striking a rock now and then on a rapid, when the men would wade ashore, repair the canoe, and launch forth again. The Indians, of different tribes, were found on either bank at frequent intervals, and more or less barter, present-giving, and council-holding was indulged in.

At the junction of the Koos-koos-kee and Kim-oo-e-nim — Clearwater and Snake — rivers they identified the latter as the stream upon whose head waters — Lemhi — they had encamped when among the Shoshones.

The Snake was called by Lewis and Clark the Lewis River, and this name should have been perpetuated.

This branding iron, used by Lewis and Clark, was found in 1892 on one of the Sepulchre or Memaloose Islands in the Columbia River, three and one-half miles above The Dalles. It is now in possession of Mr. Geo. H. Himes, Assistant Secretary Oregon Historical Society, Portland, Ore.

The dimensions of the face are $4\frac{1}{16}'' \times 4\frac{3}{4}''$ over all; the hollow panel is $2\frac{1}{4}'' \times 4\frac{9}{16}'', \times 1\frac{7}{16}''$ deep; the bottom, $2\frac{3}{8}'' \times 4\frac{9}{16}''$. The panel upon which are the words — reversed, of course, as in all set type — "U. S. Capt. M. Lewis," is $1\frac{1}{2}''$ wide by $\frac{9}{16}''$ thick.

The hollow interior was, evidently, to be filled with such additional letters, marks, or devices as the occasion demanded, as our movable type hand stamps now are. The back was fashioned for a handle that could be clamped, and this was attached to the instrument by the round lugs at the ends, much as the handle of a modern carpet sweeper is. Its use was undoubtedly to brand horses, canoes, saddles, utensils, etc. Under date of October 5, 1805, both Gass and Lewis and Clark speak of branding their horses when leaving Canoe Camp on the Koos-Koos-Kee.

On October 16th the Columbia proper was reached, and on October 22d they arrived at the Great Falls of the Columbia, now known as Celilo Falls.

Before reaching the Great Falls they saw Mount Hood twice, and also, as they supposed, Mount St. Helens. As regards the latter they were undoubtedly mistaken, it being Mount Adams instead. Fremont made the same mistake as doubtless did others in early days, for peculiar reasons.

The great expedition has now reached the most imposing and tremendous portion of the Columbia River, and, from the standpoint of navigability, the worst.

The stretch of water from the Great or Celilo Falls to the Cascades is, scenically, of the superlative degree. The black lava palisades rise in noble terraces, towers, and chimneys, farther down becoming merged in the overtowering range. The frozen product of the volcano runs athwart the stream and seemingly, also, with it, forming a series of gigantic

The Cascades of the Columbia River, or Great Rapids of Lewis and Clark.

obstructions, across and through which the river has eaten its way in a succession of rapids, swirls, falls, and cross currents.

The Great Falls, at moderate or low water, forms, at the southern shore, a fine fall of twenty to forty feet in height, the remainder of it being one of the most amazing, irregular cascades, extending entirely across the Columbia. Below the Falls the river divides into various channels, and the lava is formed more or less into islands, and among them the water seethes and boils as if stirred by the furies. Most of these islands are repositories of the Indian dead. Memaloose Islands they are called, Sepulchre Island, so called by Lewis and Clark, being the best known. On this island a white man also lies buried, with a rather imposing stone monument over his remains. Some of these islands have thus been filled to overflowing. The stream for many miles below the Falls is known as the Dalles, and is a great attraction to sight-seers.

To portage around the entire obstructive portion of the river here was impossible. The explorers therefore portaged around the Falls, and, dangerous though it was, boldly navigated the Dalles, and successfully. Just below where Dalles City now is they halted for a few days at what they termed Fort Rock.

This piece of river, especially at the Cascades, may very appropriately have been called Robbers' Roost, Rogues' Canyon, or Freebooters' Pass. The Indians here seem to have been pretty generally possessed of the devil, and harried every exploring or trading party that passed down the stream in early days. Numbers alone seem to have been the only thing that prevented or lessened wanton insult and injury, while even then stealing and pilfering were successfully practiced. Lewis and Clark's experiences were mild, compared with those who came later.

November 1st the party succeeded in passing the

The Dalles of the Columbia River.

Great Falls of the Columbia (Celilo Falls).

Cascades, by portage of course, and were now fairly within the depths of the Cascade Range.

I do not find, so far as I have been able to examine, that Lewis and Clark ever used the term Cascade in connection with this range, and seldom, indeed, the word itself. "Rapids" and "shoots" are generally used when rapid water is referred to, and as to a name for the range itself, none seems to have been even suggested. At one place they say, "of that chain of mountains in which Mounts

Astoria and Tongue Point.

Hood and Jefferson are so conspicuous, * * *" as if the idea of naming it was farthest from their thoughts. A cursory reading of Parker's "Journal of an Exploring Tour," etc., edition of 1844, does not find the word used, nor does the map, bearing date 1838, show it. Fremont — 1843–44 — uses, at one point, the words, "The Cascade or California range." Later, he says: "We were now approaching one of the marked features of the lower Columbia, where the river forms a great *cascade*, with a series of rapids. * * * The main branch of the *Sacramento* River and the *Tlamath* issue in cascades from this range, and the Columbia, breaking through it in a succession of cascades, gives the idea of cascades to the whole range, and hence the name of the CASCADE RANGE. * * *"

John Lambert, one of Governor Stevens' topographers in 1854, had a somewhat different idea as to what suggested the name, as the following will indicate:

"Going down the Columbia, the reason of the Cascade Mountains being so named becomes apparent on the steep sides of that tremendous chasm * * * . Foremost among the wonders that attract the admiring gaze of travelers are the numerous and beautiful little falls which pour from every crevice, at every height, and frequently from the very mountain top. * * * As many as twelve of these

fairy cascades can be counted within view in a single reach of the river. Some, descending from hanging rocks, are dissolved in spray less than half way down the fall; others steal down the crooked crannies of the mountain, never actually leaving their steep channels in which they glisten like a snow-wreath; and not a few seem as though they were frozen on the mountain side, so regular and imperceptible is the motion of the water, and a telescope is necessary to prove that they really are what they barely seem to be. Most of them are but tiny threads of foam; but on turning a projecting and sheltering cliff, there is found another little beauty in a nook adorned by groups of evergreens, where the water pours over a broader ledge, and spreads into a veil such as Undine might have worn; gently waving with the undulations of the air, every drop yet appears so distinctly to the eye that we pause, though vainly, to hear it plashing on the rocks beneath."

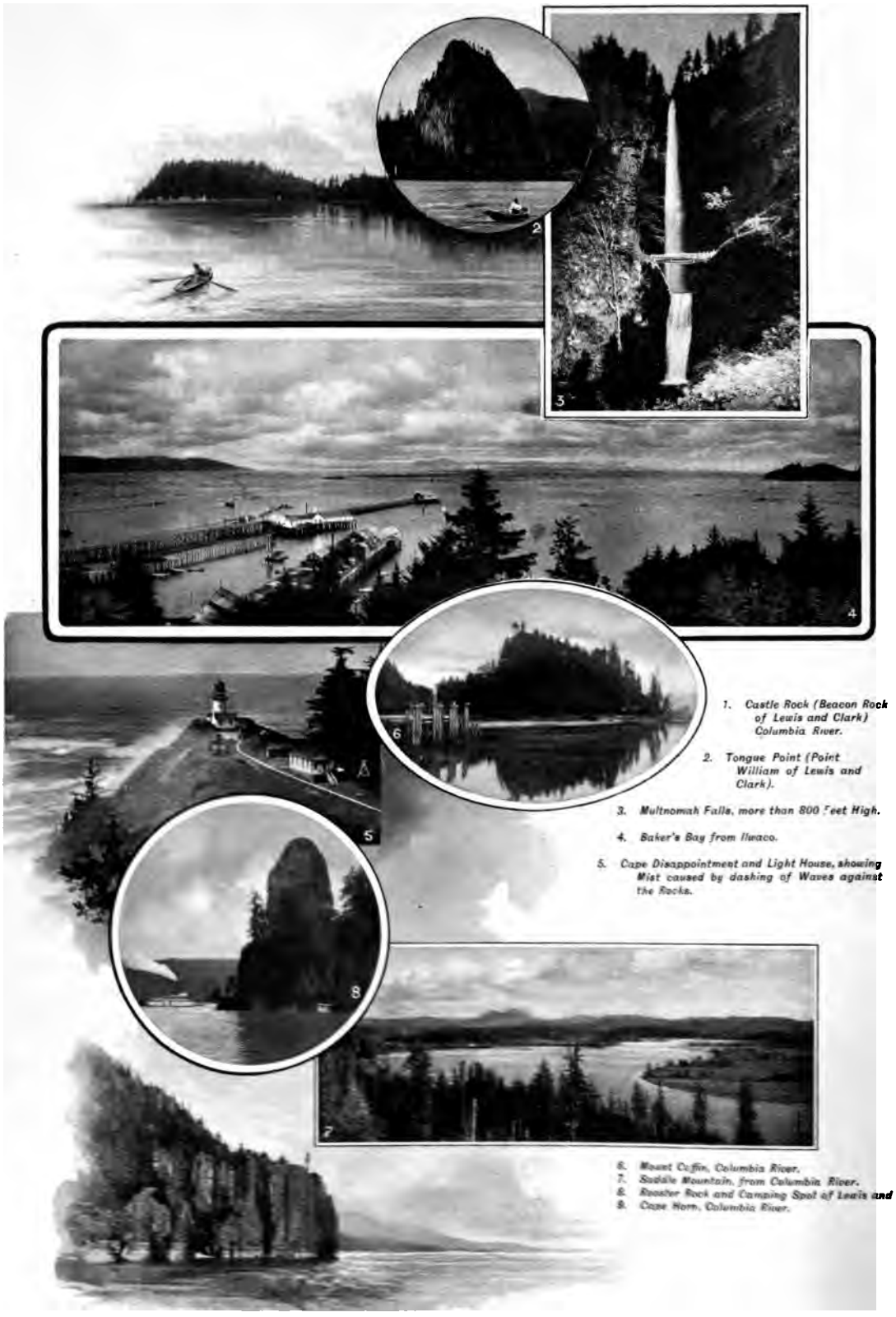
Whoever, if anybody, formally suggested the name, or whether, like Topsy, it just "growed" from either or both of the foregoing ideas, Lambert's description is a very effective one of the many beautiful cascades that go tumbling down the sides of the cliffs.

The most beautiful and conspicuous of these is Multnomah Falls, said to be more than eight hundred feet in height, a long, attenuated, filmy spray thread that pours over the mountain with a grace and gentleness almost indescribable. The other more noted cascades are Bridal Veil, Latourelle, Horse Tail, and Oneonta.

In some respects there is but little change, in others much, to be noted here since Lewis and Clark passed along. The great scenic features remain, and it is to-day the greatest water course of the country in this respect, far exceeding the famed Hudson. The Indians are few and far between; numbers of them still live about the Dalles, in squalor, and bury their dead on the islands as of old.

The Cascades are now navigable, engineering science having built locks around them, and steamers now carry enthusiastic tourists to and from Portland and Dalles City. On the south bank too, now, is found a railway line connecting the Inland Empire which Lewis and Clark traversed, with Portland and tide water.

Two objects along this section of the river that always attracted attention from explorers and traders, were the submerged forests above, and the Indian sepulchers just below, the Cascades. The submerged forests are indeed interesting, and can be seen to-day. Lewis and Clark make no extended allusion to them. Parker, Fremont, Gibbs, Newberry, and others refer to them, and were generally of the opinion, as were Lewis and Clark, that they were caused by landslides from the mountains damming the river at the Lower Cascades. The trees stand in their natural positions, and Parker estimated their height to be from twenty to thirty-five feet.



1. *Castle Rock (Beacon Rock of Lewis and Clark) Columbia River.*
2. *Tongue Point (Point William of Lewis and Clark).*
3. *Multnomah Falls, more than 800 Feet High.*
4. *Baker's Bay from Ilwaco.*
5. *Cape Disappointment and Light House, showing Mist caused by dashing of Waves against the Rocks.*
6. *Mount Coffin, Columbia River.*
7. *Saddle Mountain, from Columbia River.*
8. *Rooster Rock and Camping Spot of Lewis and Cla*
9. *Cape Horn, Columbia River.*

Latterly, scientific men have accounted for this phenomenon by two other theories. Captain Dutton claims it to be due to "an uplift" of the mountain country, some five and one-half miles wide, across the stream, which dammed and gradually raised the river above the obstruction. Mr. Emmons of the United States Geological Survey, refers favorably to an Indian legend that a natural bridge once existed here, across which the Indians of distant generations crossed the river dry-shod. He thinks the lava stream spread across the river, resting on an unstable, friable conglomerate, which in time was eaten away by the water, leaving a natural lava bridge, which eventually tumbled in and formed the dam. Writing to my friend, Mr. G. K. Gilbert, also a geologist of the United States Geological Survey, regarding this phenomenon, he replied that, after considerable study of it, based upon his own independent observations, in 1899, he "was satisfied that Newberry had given the true explanation."

The Indian graveyard existed for many years on the north bank of the river. Lewis and Clark speak of it as "an ancient burial place." The "vaults" faced to the east, and the doors were "decorated with the rude pictures of men and other animals." The vaults contained bodies wrapped in skins, "tied with cords of grass and bark," with brass kettles, baskets, frying pans, bowls, hair, medicine bags, etc., hanging above them. Ross Cox, in his "Adventures on the Columbia River," 1831, written as of 1812, verifies Lewis and Clark's description, and says that the excavations were "closely covered with pine and cedar boards, and the top boards sloping to let off the rain. * * * Several of these boards are carved and painted with rude representations of men, bears, wolves, and animals unknown. Some in green, others in white and red, and all most hideously unlike nature."

Major O. Cross of the United States army, in 1849, wrote of these graves that they were "in a large, dense grove of hemlock and fir trees, whose limbs spread a shade over the whole spot, almost excluding the light of heaven, * * * which seemed, in defiance of the foliage, to shed its rays now and then upon the tombs of the dead. * * * Heaps of bones of all sizes and ages were lying about, and * * * all shapes, as far as the head was considered, for these people have a singular fancy, peculiar to themselves, of flattening the forehead. * * * Many of these skulls had been removed and scattered through the woods by persons, whose curiosity being satisfied, had dropped them where the wagon wheels had pounded them into dust."

Time, a railroad, and excavation by the whites have about obliterated this old sepulchral spot. The writer was presented with a beautiful string of the blue and white beads so prized by the natives, that were taken from this place.

In passing down, and again up the Columbia, the captains noted most of the affluent streams, the islands, and many of those striking headlands, cliffs, and palisades that now so delight the traveler. In the mutations of time nearly all these names have been changed, to our shame be it said. Thus, Beacon Rock has become Castle Rock; Diamond Island, Government Island; Wappatoo Island, Sauvie's Island; Point William, Tongue Point, etc. Lone Rock, rising from the middle of the river, near Cape Horn, was noted, but Cape Horn itself seems to have been passed without comment. They camped one night under the lea of "a high projecting rock, * * *" which, from its location, would appear to be Rooster Rock, and they described Mount Coffin, below the mouth of the Cowlitz River. Pillar Rock, a black rock rising from the river, but of smaller size than Lone Rock above, is noted, and from above that rock they are supposed to have seen "the Ocian, this great Pacific Octian which we have been so long anxious to see, and the roreing or noise made by the waves breaking on the rocky shores * * * may be heard distictly." When, last summer, from the pilot-house of a Columbia River steamer, I strained my eyes in what I felt was a vain endeavor to see the Pacific, on the shore of which I had stood the day previous, at Cape Disappointment, and appealed to the captain in the matter, he replied that the "octian" could *not* be seen from there, but that *during a storm* the breakers *could* be heard. No storm is noted by Lewis and Clark at this point.

Below Cathlamet the river widens, and above Astoria and Tongue Point it is about nine miles across, and at the bar, between Point Adams and Cape Disappointment, it is six or seven miles wide, so that, while a wide expanse of water was undoubtedly visible, it seems doubtful whether the explorers really saw the ocean, or, perhaps, even heard its "roreing."

Before reaching Pillar Rock they saw, to the southwest, Saddle Mountain, a characteristic peak and one of the most conspicuous landmarks of the Lower Columbia.

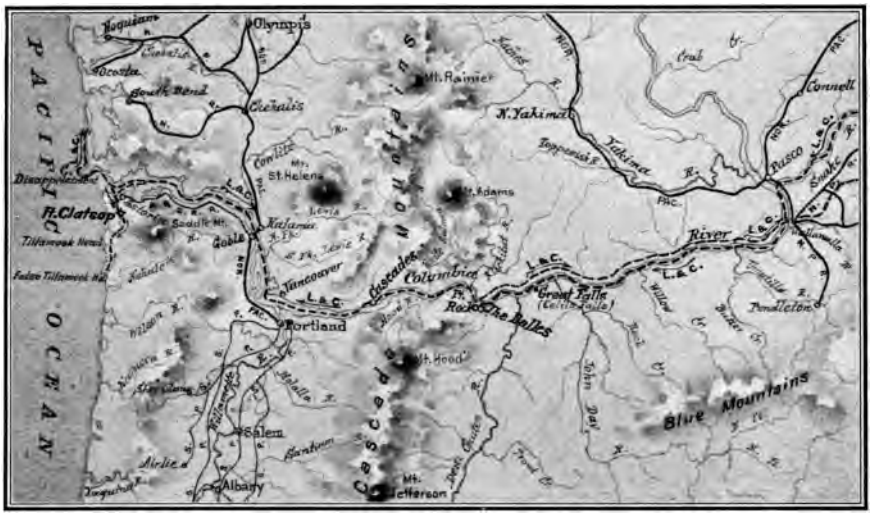
From November 8th to December 7th, 1805, the party were coasting the shores of the river and ocean, when the weather allowed, and seeking a spot for a permanent camp for the winter.

As the Columbia, in 1804, was a great waterway for the savage, so to-day it is for the men of civilization. The villages of Indians, thick with vermin, have vanished, and the villages of the palefaces have succeeded them. The canoes of the red men are rotted and gone, and the electric-lighted floating steam palaces of the whites now plow the waters of the great river.

Upon the broad bosom of the stream and its affluent, the Multnomah — Willamette — is now carried on a vast commerce, not alone provincial but world-wide in its scope. Along the banks of

both streams the Northern Pacific trains rush, and two cities, Portland and Astoria, climb heights where Lewis and Clark saw naught but gloomy forest.

The bar of the Columbia has been shorn of its terrors, and lighthouses now throw their beams across its boiling waters to guide the mariner to port. But otherwise the great mountains and the river are much as they were a hundred years ago.



Lewis and Clark's Route. Columbia River — Fort Clatsop.

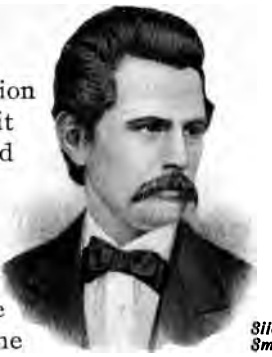
FORT CLATSOP.

The privations the explorers endured hereabout were constant and hard, and endurable only because they had become inured to them.

They rounded Cape Disappointment, at whose base Fort Canby is now located, and proceeded up the coast some distance on a reconnoissance, and finally established themselves for the winter on the south side of the Columbia, about six miles below where Astoria now stands, on the river Netul — now Lewis and Clark's River — an affluent of the Columbia. The north shore along which they coasted is now a well-known summer resort, Long Beach.

At Tongue Point, Lewis and Clark's Point William, and "a very remarkable knob of land * * * four miles round * * * while * * not more than fifty yards wide," they camped "on a beautiful shore of pebbles of various colors" and were rainbound for ten days. This was facing the site of Astoria, and the Government now has a hydrographic station there. The beautiful pebbles are still there, too.

The site of their winter encampment, which they called Fort Clatsop, after a neighboring tribe of Indians, was a good one. It was some thirty feet above high tide and commanded a good view



Silas B. Smith.

down the Netul River toward the bay — an expansion of the Columbia, now Young's Bay — into which it debouched. Fuel and water were at hand, and game, the proximity of which was the particular reason that caused them to locate there, very plentiful at first.

They at once began to construct their huts, and completed them December 24th, the same date as that on which they completed Fort Mandan one year before. The huts were seven in number, and appear to have been comfortable habitations.

The winter was a wet one. Gass, under date of April 8, 1806, when on their return, writes: "Some of the men are complaining of rheumatic pains, which are to be expected from the wet and cold we suffered last winter, during which, from the 4th of November, 1805, to the 25th of March, 1806, there were not more than twelve days in which it did not rain, and of these but six were clear."

They passed the time in various useful diversions, stockading their fort, bartering with the Indians, studying natural history, ethnology, etc., and naturally there was much hunting, of elk principally, for food and skins. Toward spring the elk became shy and left the region, thus hastening the party's departure.

Mrs. Helen Smith. (Daughter of Chief Cobaway-Comowool.)

Gass kept an inventory that shows that between December 1, 1805, and March 20, 1806, they killed 131 elk and twenty deer, and that there were on hand 338 pairs of "mockasons."

Their relations with the Indians, particularly the Clatsops, were of the friendliest sort. To Comowool, Chief of the Clatsops, they bequeathed Fort Clatsop when they abandoned it.

In 1899 I visited the site of old Fort Clatsop. There were with me, Wm. Chance, Judge J. Q. A. Bowlby, Geo. W. Lounsberry, Geo. Noland, and Silas B. Smith, all of Astoria and vicinity, and Geo. H. Himes and Geo. M. Weister, of Portland. Several of these were old residents, and thoroughly familiar with the early history of the region. There is, evidently, no question as to the point we visited being the identical spot where the fort stood, although there is now nothing to indicate it except Lewis and Clark's own description as to its location.

The Mr. Silas B. Smith mentioned is a grandson of the old Clatsop chief Comowool. He has hardly reached middle age as yet, and as a young man was educated in New Hampshire. He is a practicing attorney at Warrenton, Oregon. I append herewith a memorandum relating to Lewis and Clark, Fort Clatsop, Chief Comowool, etc., kindly given me by Mr. Smith. I have but slightly

curtailed this memorandum, as it is all interesting, and some of it, perhaps, of considerable value.

"Concerning the arrival of the Lewis and Clark expedition at the mouth of the Columbia River in November, 1805, and their sojourn at Fort Clatsop the succeeding winter, as usual, more or less tradition was handed down by the Indians to their descendants, of the doings and characteristics of the people who had come among them.

Site of Fort Clatsop.

"At that time *Cobaway* — Kōb-ah-way — was the principal chief of the Clatsop tribe of Indians, within whose territory Fort Clatsop was established. Lewis and Clark erroneously gave the name of the chief as *Comowool* — that arose no doubt from the indistinct manner in which the Indians pronounced the name; according to their pronunciation the 'b' in the name is but faintly sounded.

Site of Fort Clatsop, and Netul River.

"On the eve of their homeward journey Lewis and Clark presented their stockade at Fort Clatsop to Cobaway, and also left with him a copy of the certificate announcing their arrival at the mouth of the Columbia River, to be given

Ruins of Salt Cairn used by Lewis and Clark.

Tillamook Head and Light House.

to the captain of the first vessel that should arrive at the river. Cobaway, with his family, occupied Fort Clatsop as a fall and winter residence, that being the season for good fishing on the Netul River.

"The chief had three daughters that arrived at womanhood, and all married white men for husbands. The eldest, Kilakotah, finally became Mrs. Louis Labontie, and the two were among the first settlers of the Willamette Valley, Labontie crossing the continent in 1811 with Wilson P. Hunt. The second, Celiast, became Mrs. Solomon H. Smith. Her Christian name was Helen. With her husband they were among the earlier settlers in the Willamette, finally becoming the first agricultural settlers west of the Coast range of mountains, settling and opening up a farm on Clatsop Plains, Clatsop County, Ore., in August, 1840. Her husband crossed the continent in 1832 with Capt. Nathaniel Wyeth, and taught the first schools on the northwest coast, teaching at Fort Vancouver and in the Willamette country in 1833 and 1834.

"The third daughter, Yaimast, became Mrs. Joseph Gervais. Gervais also came with Hunt in 1811, and was, I think, the first settler on the French prairie in the Willamette. This is the same man after whom the town of Gervais, in Marion County, Ore., is named.

"Kilakotah's first husband was W. W. Matthews, a clerk of the Astor expedition. He died in New York. Their one daughter, Ellen, was the first child born of white parents in the Oregon country so far as we know, the date of birth being July 1, 1815.

"Cobaway's descendants now live in four States — California, Oregon, Montana, and Canada — are too numerous to mention, and all are drifting away from his race.

"My mother, Celiast Cobaway, the chief's second daughter, lived until June, 1891, and always maintained that she remembered the time of Lewis and Clark's arrival, and also seeing the men. Mother said that in one of the houses they used was the large stump of a tree, which had been cut smooth, and which was used as a table. The tree had been cut down and then the house built, enclosing the stump.

"The Indians here used to tell of the remarkable marksmanship of Captains Lewis and Clark with firearms, and of the surprises they used to give the savages by the wonderful accuracy of their shots. The Indians would notice some waterfowl sitting far beyond the range of bow and arrow, and would ask one or the other of the captains if he could hit it with his rifle; a trial would generally bring down the bird, sometimes even just clipping off its head. Of course such feats would impress the Indians with the remarkable qualities of the white men.

"An Indian youth, Twiltch by name, used to assist at Fort Clatsop in the hunting of elk and other game, and was there taught

the use of firearms, in the handling of which he became proficient. I knew him in his later years, and in my earlier acquaintance with him he stood at the head of the hunters of his tribe, and more particularly in the art of elk hunting. It was always his boast that he was taught the art by Lewis and Clark. He seldom went out without securing an elk, and he would tell his people that he had the power to charm the game, and they were not able to get away from him, and his usually good fortune induced a good many of them to believe him. He lived until somewhere in the later '50s.

"The Indians inhabiting the upper part of Young's River Valley and the upper Nehalem Valley were known as the Klatskanin people. It was claimed by Chief Cobaway that these people were disposed to attack the encampment at Fort Clatsop, and it was only through his influence and constant dissuasion that they were restrained, and no violence committed.

"Lewis and Clark speak of the Indians bringing 'shanataque' and 'culhoma.' The first should be shanatawhee. It is the root of the edible thistle; the first year's growth of the thistle, that has one straight root something like a parsnip. They gather and cook them in a pit with hot rocks and grass, the whole being covered with dirt and left in that manner over night; when taken out the roots are of a dark purple color, the starch in the root has been converted into glucose, and it is tender, sweet, and palatable. 'Culhoma' should be culwhayma. It is the root of what is popularly known as the wild blue *lupine*. The root grows two or three feet long and about one inch to an inch and a half in diameter. This is cooked generally in hot ashes, as we would roast a potato in ashes, and it tastes something like a sweet potato. They also speak of a berry something like the 'Solomon's Seal,' which the Indians called 'Solme.' In this they made a mistake, and made a wrong application of the name Solme. Solme is the wild cranberry and nothing else. It is not the 'Solomon's Seal,' nor any variety of it.

"They also state that the Indians near Tillamook Head called the Columbia River 'Shocatilcum'; that upon inquiry of them as to where they got the wappatoes, they gave this name, meaning the Columbia River. They entirely misunderstood the Indians' meaning. This is very easy of explanation. The wappatoes used here are obtained from Cathlamet Bay, above Tongue Point on the Columbia River. *Shocatilcum* was the chief of the Cathlamets; at that time his tribe was Shocatilcum's people, and when the Clatsops were asked where they got the wappatoes, they pointed over toward the Columbia and said '*Shocatilcum*,' meaning only that they had got them from Shocatilcum's people. They had known of Shocatilcum for a long time and supposed everybody else knew of him, too.

"I wish to state this proposition, which can not be overthrown,

that the Indians in this Northwest country, extending as far back as the Rocky Mountains, never name a river *as* a river; they name localities. That locality may be of greater or less extent, and they may say this water leads to such a place, or it will carry you to such and such a place, but never name a stream.

"I know of some very good people who are hunting for the Indian names of the Columbia and its tributaries, and some who have even told me that they had found the name of the Columbia; but it is a mistake, an entire mistake, for it is not in the book, and they are simply chasing a 'Will o' the wisp.'

"SILAS B. SMITH."

Before reaching Fort Clatsop the explorers' supply of salt had run low. In selecting the winter's encampment, proximity to the seacoast was an important factor, as it was necessary to evaporate the sea water to obtain salt.

Soon after the site of Fort Clatsop was selected, a party was sent to establish a salt camp. This was done at a point southwest from the fort, distant, as they traveled, as I understand it, some fifteen miles. The salt-making was rather a serious business. They were obliged to keep fires burning under their *five* kettles, not *one*, as Harper & Bros.' small two-volume edition of Lewis and Clark states (see Coues' Lewis and Clark, p. 739), night and day, and they finally evaporated about twenty gallons of salt of a fair quality.

With several of the party heretofore mentioned, I also visited what is supposed to be the rock cairn where this process was carried on.

I quote Mr. Smith anent this also:

"Mother often told of Lewis and Clark making salt near Tillamook Head, at the place now known as Seaside [a pleasant summer resort]; but she used to tell this long before the place was called Seaside. The name Seaside was given by Ben Holladay in 1872, when he built his hotel there and called it the 'Seaside House'; then the name Seaside was given to that section. Previous to that the Indian name of the place was Necotáht.

"I remember also hearing some white men and Indians, in the fall of 1849, who went to Necotáht, say on their return that they saw the place where Lewis and Clark made salt near Tillamook Head. My mother used to tell of their salt-making when we didn't have any of the works of Lewis and Clark to consult, but simply tradition. It was generally understood among whites and Indians here as long ago as I can well remember that the place of salt-making by Lewis and Clark was near Tillamook Head.

"Mr. A. J. Cloutrie, a resident at the Seaside since 1856, stated to me more than thirty years ago, that the stone arch where Lewis and Clark made salt was not far from his residence, and proposed to show it to me if I wished to see it; that was in my younger

Junctio of the Clearw and Blackfo Rivers, Montan

Lolo Peak.

days, and I did not care much about seeing it, so we didn't go. From all these traditions and circumstances, I am well satisfied that the cairn which I visited near Tillamook Head, in company with Mr. O. D. Wheeler, of the Northern Pacific Railway; George H. Himes, Secretary of the Oregon Historical Society, and others, on the 28th of August, 1899, was the identical structure where Lewis and Clark's men manufactured salt from sea water in the winter of 1805–6.

Missoula and Foot of Bitter Root Valley.—Looking South.

Hellgate River in Foreground. Lolo Peak in Background. Captain Lewis followed Bitter Root River down to Junction of Hellgate, then followed up the latter Stream along the Foreground of the Picture and through Hellgate Canyon. The Route of Lewis and Clark across the Mountains was along the base of Lolo Peak Travelers Rest or Lolo Creek following the base of the Mountains to the right.

On the Blackfoot River.

"On this visit we had for guide one Mr. John Hall, a son-in-law of the above-mentioned Mr. Cloutrie, and to whom Mr. Cloutrie, before his death, had pointed out the stone structure as the salt-making pit of Lewis and Clark."

While of course it is not now possible, probably, to determine this question, actually and by direct evidence, I see no special reason to doubt that the cairn visited was what it is claimed to be.

It is certainly an ancient structure, and now much overgrown by dwarf pines or similar trees, so that it was difficult to photograph it. Its size is commensurate with the five kettles that were used in the salt-making.

HOMEWARD BOUND.

On March 23, 1806, at 1 P. M., Fort Clatsop was abandoned, and the expedition turned their faces homeward. The day before, they formally gave to Comowool their "houses and furniture," in return for his kindness and hospitality, and bade him farewell.

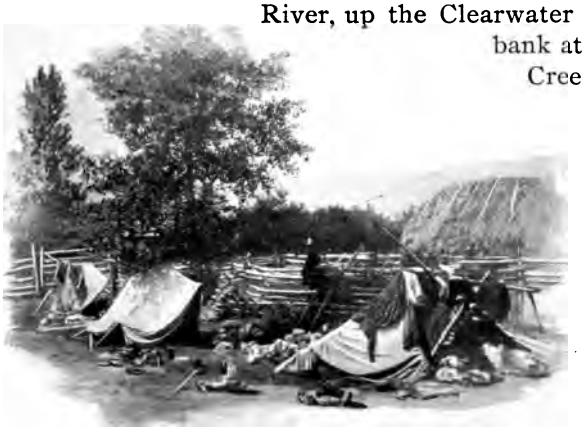
Not knowing what their fate might be on their return journey, and not having been able to apprise the President of their progress,

they wrote a notice, and left several copies of it with Comowool and others, posting one at their quarters also, in order that the world might some day learn of them, and their whereabouts be at least partially established. One of these notices did eventually reach Philadelphia by way of China. This paper read as follows:

"The object of this NOTICE is, that through the medium of some civilized person who may see the same, it may be made known to the informed (sic) world that the party consisting of the persons whose names are hereunto annexed, and who were sent out by the Government of the United States, in May, 1804, to explore the interior of the Continent of North America, did penetrate the same by way of the Missouri and Columbia rivers to the discharge of the latter into the Pacific Ocean, where they arrived on the 14th of November, 1805, and from whence they departed the....(23d)....day of March, 1806, on their return to the United States by the same route they had come out." — [Coues, p. 903.]

The same party that on April 7, 1805, started westward from Fort Mandan, now began the return journey; not one was missing.

They arrived at the Dalles on April 15th. On the way they accidentally heard from two strange Cashook Indians of the existence of the Multnomah — Willamette — River. Clark immediately set out to explore it, going up nearly to where Portland now is. He found that islands had hidden it from them as they had gone up and down the Columbia. During this trip he saw and named Mount Jefferson of the Cascade Range. He also saw, at one time, as so many have since, those five white-robed giants, Mounts Rainier, St. Helens, Adams — unnamed then — Hood, and Jefferson. At the Dalles they abandoned canoe transportation and proceeded by land, having obtained a few horses. They reached the mouth of the Wallawalla River, under the lead of a good Chopunnish guide, on April 27th. Obtaining more horses there, they pushed on eastward across the now well-known Wallawalla country, a great and noted wheat and fruit growing region, and on May 5th reached the junction of the Clearwater and Snake rivers. They then proceeded, with numerous chiefs, camping en route at the mouth of Colter's Creek or the Potlatch River, up the Clearwater to a point on the north or east bank at the mouth of Lawyer's Canyon Creek, as it is now called, and to which Doctor Coues gives the appropriate name of Camp Chopunnish. They reached this place May 14th, and because of the snows on the mountains, remained there until June 10th.



Nez Perce Tepees, 1899.
On Rose Fork of the Bitter Root River.

Upon their first attempt to cross the range, they were beaten back by the wintry cold and deep snow on the higher slopes. They then procured some Chopunnish guides and on June 24, 1806, once more essayed the passage of the mountains. The Indians took them steadily along, although Jordan was a hard road to travel, and on June 29th they were once more at the Lolo Hot Springs, and on June 30th reached their old camp at the mouth of Travelers Rest or Lolo Creek in Bitter Root Valley.

Waugh's Cabin on Camp Creek. Just at Foot of Mountain below Gibbon's Pass.

My attempt to explore Lewis and Clark's trail across the Bitter Root Range was frustrated by stormy weather. I ascended Lolo Creek to the Hot Springs, and then went beyond the Lolo Pass to the extreme headwaters of the Clearwater on what was supposed at the time to be their Glade Creek, where I camped. From there I pushed several miles farther into the range over a very old and disused trail, supposed to have been the one Lewis and Clark used.

Old Trail on Divide above Waugh's. Actual Summit of Gibbon's Pass.

Since studying their detailed report as given by Coues, and after a rough platting of Lewis and Clark's courses through here, I am considerably puzzled as to their route and as to where I camped.

Old Trail along the Ross Fork that Lewis and Clark used. Taken at a point just before it climbs the Mountain leading to Ross' Hole.

While the present old and well-known Lolo Indian trail undoubtedly marks in a general way the route used by Lewis and Clark, from a number of considerations I am led to doubt exceedingly, whether, as a matter of fact, they used more than a small part of this trail as it now runs.

DIVISION OF THE EXPEDITION—CAPTAIN LEWIS' ADVENTURES.

We have now reached another important stage in the annals of the expedition.

The worst is over; although not yet where the waters run Atlanticward, they have but a short road to the Missouri, and an easy one, as the Indians inform them. While they, of course, do not know just what is before them, they *do* know that the worst obstacle of their outbound journey, the Bitter Root range, has been successfully overcome, and that they are nearing the buffalo country, where food and raiment may be had for the shooting.

At Travelers Rest the most important segregation of the exploration takes place.

Captain Lewis, nine men and five Indians, on July 3d, follow down Clark's — Bitter Root — River to its junction with the Hellgate River, thence via that stream to the entrance of the Cokalahishkit — River of the Road to Buffalo — or Big Blackfoot River, which they follow to the divide, now called Lewis and Clark's Pass (although Clark himself never saw it), thence north across country to the Medicine — Sun — River, which they followed down to their old camp at the White Bear Islands.

There were no special incidents connected with this trip; the Indians left Lewis at the junction of the Bitter Root and Hellgate rivers — about where Missoula now is — with feelings of fast friendship on both sides; the trail was an easy one, game plentiful, and "all went merry as a marriage bell," with no Waterloo at the end.

At the Great Falls — White Bear Islands camp — Captain Lewis subdivided the party, he with three men going with horses to explore Maria's River and Valley, while Gass with five men remained to attend to the portage around the Falls.

The Captain's route lay to the northwest, across the Tansy — Teton — River to the upper Maria's, the north or Cutbank fork of which they followed across the present Blackfeet Reservation nearly to the mountains, without seeing a soul. Retracing his steps to the main or Two Medicine River fork, this was followed to its junction with the Cutbank. Near there they met eight mounted Indians, on a hunt, with whom they camped overnight. In the morning, when the Indians tried to steal both their arms and horses (and nearly succeeded), they attacked them—four against eight—recaptured their arms and most of their horses, and in the melee killed two Indians. The other Indians escaped, and Lewis, knowing that two large bands of the tribe were not far distant, ordered his men to their horses and they executed a Lochinvar quickstep. At two o'clock the next morning they were 100 miles from that spot and near where Fort Benton now is, at the mouth of the Teton River.

Hastening forward down the Missouri River at daylight, in order to warn Gass and his party, now, presumably, at the mouth of Maria's River, they had traveled twenty miles — making 120 miles in about twenty-four hours — when they heard the sound of rifles. Hurrying

to the river bank, they saw — not Indians, as they probably feared, but Sergeant Ordway's party, who had come down the Missouri with the canoes used by Captain Clark, from the Three Forks of the Missouri. At the mouth of the Maria's they found Gass and the horses, and, opening their caches, they loaded their luggage in their canoes, gave "a final discharge to our horses," *i. e.*, turned them loose on the prairie, and on July 28th started down the Missouri River. They passed the mouth of the Yellowstone August 7th.

This unfortunate escapade of Captain Lewis is said to have roused an enmity among the Blackfeet tribe that, at least until recent years,

†*Captain Lewis Shooting an Indian.*

never slumbered, and which cost the lives of many white men. This was the only serious difficulty the expedition had with Indians.

CAPTAIN CLARK'S PARTY — DOWN THE YELLOWSTONE.

And what of Captain Clark and his men all this time?

After Captain Lewis had set out on July 3d *down* the Bitter Root or Clark's River, Captain Clark with the remainder of the outfit, twenty men, one squaw and one pappoose, started *up* the river along its western bank. The printed journals give the number of men as *fifteen*, but Dr. Coues clearly shows this to be an error. They traveled thirty-six miles that day, and on July 4th made thirty miles, reaching the forks of the stream and camping on the Nez Percé fork. The country over which they traveled is now covered with vineyards, orchards, and clover fields, with patches of wild or pine timbered land alternating. One orchard alone contains 48,000 apple trees.

Continuing, the party crossed the mountain eastward by the Indian trail to Ross' Hole, and then turned southeastward and followed the

Indian "road" across the divide to the waters of the Wisdom — Big Hole — River and thence to Shoshone Cove, where their canoes and some supplies were cached.

It was a delightful experience for me, in 1899, to follow up this beautiful river valley with a wagon and camp outfit to Ross' Hole, and then over the divide. There now exists a line of continuous, though in the upper valley somewhat sparse, settlement, clear to the foot of the divide. We camped one night in the angle formed by the Nez Percé and Ross' Fork branches, near where Captain Clark bivouacked on the night of July 4, 1806. On Camp Creek, above Ross' Hole, on our return, the wagon broke down, evidently within a short distance of where Clark slept the night of July 5th. Mr. Waugh's comfortable log cabin stands not far from where the old Indian lodge pole trail crossed the mountain to Wisdom River. The trail over which Lewis and Clark entered the valley in 1805, farther south, can be faintly traced along the mountain's side, and it reaches the valley a mile or two south from Waugh's.

A good wagon road now leads up the valley, but at places the Indian trails can still be seen. This is notably so near Rye Creek, and farther up where the valley becomes a canyon. The old trail avoided the last few miles of Ross' Fork below Ross' Hole, because of its rough character. The point where it ascended the mountain, at the end of the wagon bridge across Ross' Fork, near Wildes Spring, is plainly visible and it is still used. The scenery of the upper valley is very fine and wild. At Rye Creek we stumbled upon the summer tatterdemalion lodges of three old wrinkled Nez Percé squaws, part of a band that had come in over the Southern Nez Percé trail.

Camp Creek obtains its name from the fact that the Indians formerly used it, as well as Ross' Hole, as a favorite camping ground.

The "jintle slope" of Captain Clark over the mountain to Wisdom River, hardly strikes one as expressing the situation. But contrasted with their trail over the range from which they had come, this characterization will be understood as a comparative one.

The old lodge pole trail over the mountain was a characteristic one, wide and winding. At the summit, as is usual, it scattered into many parallel trails. At places it now forms part of the wagon road. I rode for a mile or more beyond the pass and found the descent on the east much more "jintle" than on the western side. All over the mountain the girdled and bark-stripped pine trees are a mute testimony to

Threshing Scene near Bozeman, Mont.

From Bozeman Pass, Looking East.
Captain Clark passed down this Valley to the Yellowstone Valley.
Northern Pacific Railway in Center, Wagon Road to the Right.

Main Entrance to Rocky Canyon, near Bozeman, Mont.

the presence of the Indians, who habitually ate the delicate inner lining of the tree.

This pass is known and usually charted as Gibbon's Pass. This is all wrong and utterly unjust, and a reflection upon our methods of nomenclature as well. General Gibbon undoubtedly crossed it in his pursuit of Chief Joseph in 1877, but Clark had gone across there seventy-one years before, and Clark's Pass it should be called. As Clark never saw Lewis and Clark's Pass, 120 miles farther north, so Lewis never saw Gibbon's or Clark's Pass. As a matter of fact, as Doctor Coues has pointed out, the present Lewis and Clark Pass to the north, should be called Lewis' Pass; Gibbon's Pass changed to Clark's Pass, and Lemhi Pass known as Lewis and Clark's Pass.

From Shoshone Cove Captain Clark retraced his old route down the Jefferson River to the Three Forks, arriving there July 13th. Sergeant Ordway and nine men were here detached to take the canoes down to the Great Falls and rejoin Captain Lewis, which, as we have seen, they did successfully.

No time was lost here, for on the day of arrival Ordway and the boat party started down the Missouri, and Captain Clark and the remainder, eleven men, the squaw and her child, together with fifty horses, moved eastward. Captain Clark once more strikes out into the unknown, following the clear, rapid running, beautiful Gallatin River. Once more, too, Sacajawea proves herself a jewel. In this locality she could orient herself wherever she might be, and she unerringly pointed out the direction and pass to be taken, which was at the head waters of the East Gallatin River. There are three passes here, and this is the southernmost one.

Clark's route lay up the present Gallatin Valley, one of the most

Livingston, Mont., and Yellowstone River. Here Captain Clark first struck this River in 1806.

fertile vales of the Northwest, a veritable granary indeed, through Logan, Manhattan, and Bozeman, towns on the main line of the Northern Pacific Railway, to a well-defined "gap." This "gap" or pass lies just to the north of Rocky Canyon, through which the railway now runs, and can be identified in a moment by one studying the ground. Here the valley trails converged and, following the canyon or gap, crossed the summit, at the Bozeman Pass, just under which the railway now runs in a tunnel but slightly beneath the surface, another case of following the buffalo and Indian engineers. The proprieties would not have been violated if this had been called Sacajawea's Pass.

Down a gentle slope and over a pleasing prospect they then wound eastward, until within a few miles they reached the Yellowstone River, near the present town of Livingston.

Their route now lies down the beautiful Yellowstone Valley, then a wilderness. Between Livingston and Glendive, three hundred and forty miles, the Northern Pacific Railway follows this stream, made ever memorable by Clark's historic journey. Now it is a valley of enterprising towns and fertile farms, while the wide stretches on either side of the bottom lands are pastured by herds of cattle and sheep, as in Clark's day they were by the buffalo and antelope. Big Timber, Billings, Forsyth, and Miles City are the more prominent towns.

At Big Timber are two streams, Big Timber and Boulder creeks flowing into the Yellowstone from opposite directions. Clark, by a happy thought, called these streams Rivers Across.

On July 18th one of the men so injured himself as to make it impossible for him, temporarily, to proceed on horseback. On the 19th, therefore, it was decided to construct two canoes from cottonwood trees in the bottom. The trees were small; the canoes, when

finished, being twenty-eight feet long, sixteen to eighteen inches deep, and sixteen to twenty-four inches wide.

These home-made boats were lashed together, and they answered the purpose so well that they were used almost to the end of the journey at St. Louis.

This Canoe camp, or Camp Cottonwood as Coues calls it, seems to have been not quite half way between Columbus and Laurel on the Northern Pacific, and not far from the western line of the Crow Indian Reservation.

By the time of departure, July 24th, the injured man had recovered. The party was here subdivided, Sergeant Pryor and three men continuing down stream with the horses, while Captain Clark with the others proceeded with the canoes.

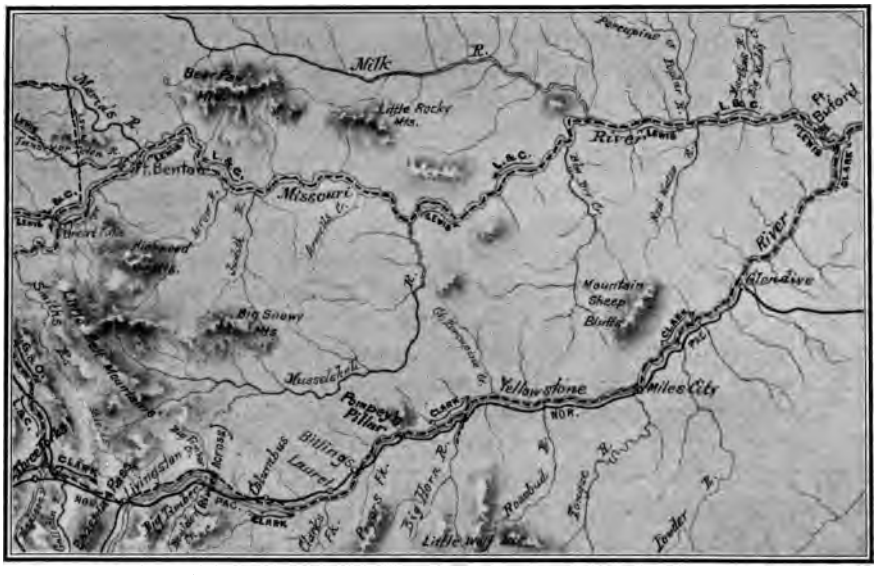
On his way down the Rochejaune or Yellowstone, Clark seems to have noted all the important streams and topographic details, as Coues' footnotes in his edition of Lewis and Clark show.

The Lewis and Clark report was not published until early in 1814, Clark having the direction of the publication of the report after Lewis' demise.

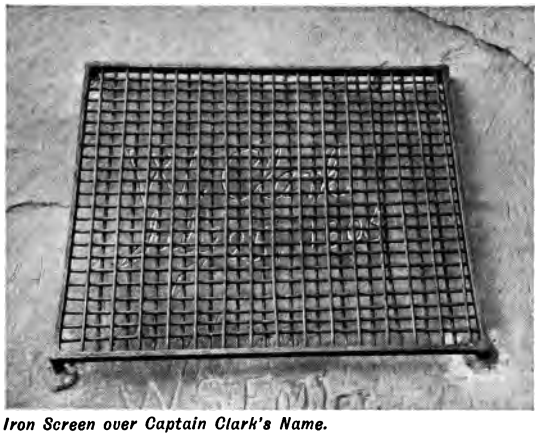
From one source and another Clark picked up much valuable and *correct* geographic and scientific information, and his map of 1814 shows that some of it was acquired subsequent to the years of the exploration, during his residence at St. Louis.

POMPEY'S PILLAR.

On July 25th the party were overtaken by a severe storm. "As soon as it ceased they proceeded; and about four o'clock,

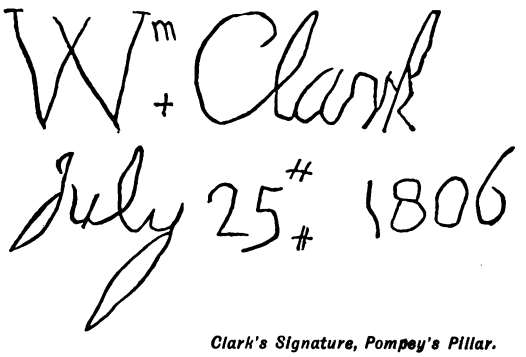


Lewis and Clark's Route. Three Forks—Mouth of Yellowstone River.



Iron Screen over Captain Clark's Name. Placed by Northern Pacific Railway.

after having made forty-nine miles, Captain Clark landed to examine a very remarkable rock situated in an extensive bottom on the right, about 250 paces from the shore. It is nearly 400 paces in circumference, 200 feet high, and accessible only from the northeast, the other sides being a perpendicular cliff of a light-colored, gritty rock. The soil on the top is five or six feet deep, of good quality, and covered with short grass. The Indians have carved the figures of animals and other objects on the sides of the rock, and on the top are raised two piles of stones.



Clark's Signature, Pompey's Pillar.

"From this height the eye ranged over a wide extent of variegated country: on the southwest, the Rocky Mountains covered with snow; a low mountain about forty miles distant, bearing S, 15° E; and in a direction N, 55° W, at the distance of 35 miles, the southern extremity of what are called the Little Wolf Mountains. The low grounds of the river extend nearly six miles to the southward, when they rise into plains reaching to the mountains, watered with a large creek; while at some distance below a range of highland, covered with pine, stretches on both sides of the river in a direction north and south. The north side of the river, for some distance, is here surrounded by romantic jutting cliffs; these are succeeded by rugged hills, beyond which the plains are again open and extensive. The whole country is enlivened by herds of buffalo, elk, and wolves. After enjoying the prospect from this rock, to which Captain Clark gave the name of Pompey's Pillar, he descended and continued his course."

Almost ninety-three years to a day from the time that Captain Clark stood on the top of Pompey's Pillar, Mr. Huffman, of Miles City, and I stood there and looked upon the scene that the Captain describes. The river, with its "romantic jutting cliffs" and its beautiful foliage, still flows swiftly by; indeed, it was just after a

time of high water, and the wavelets lapped the base of the rock; the "250 paces" were reduced to nothing. The rock stands as of yore, scarcely changed, and must still be climbed "from the north-east." The "two piles of stones" are now one, and that evidently of modern raising. Fifteen minutes' walk to the south across a wide, level, grassy bottom is the Northern Pacific railway track and the station of "Pompey's Pillar."

Mr. Huffman and I climbed all around and over the rock, and his camera caught it from different positions for reproduction in the present narrative.

In his note book Captain Clark says: "I marked my name and the day of the month and year" [on the rock] which Doctor Coues reproduces in a footnote.

The place where Clark cut his name is where the rock finger is seen on the right in one of the illustrations.

When the Northern Pacific Railway was being constructed, Col. J. B. Clough, the engineer of the Yellowstone Division, saw that Clark's name was being rapidly effaced, not alone by time but by vandals. He, in behalf of the railway company and under Mr. Villard's instructions, had a heavy double iron screen 30½x24 inches in size, made and sunk firmly into the rock with lead, so as to entirely

Pompey's Pillar from the South. At Point at right where Rock Finger is seen is where Captain Clark's name is found.

Yellowstone River. Looking West from Pompey's Pillar.

Yellowstone River. Looking East from Pompey's Pillar.

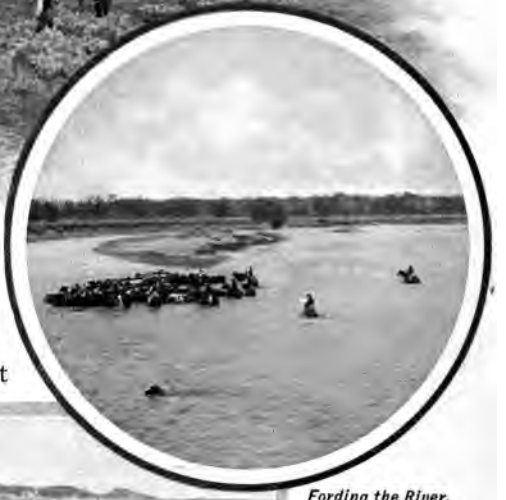
Pompey's Pillar from Railway Track.

Lambing Time, Yellowstone Valley.

Range Saddle Horses, in Rope Corral, Yellowstone Valley.

cover and protect the spot. One illustration shows the inscription before the screen was placed, another shows it as it now appears.

Clark's name is now hard to decipher. The irrepressible fool has been here, and has scratched and cut



Fording the River, Yellowstone Valley.

Cattle Herd in Yellowstone Valley.

his various names all around it, and even over some of the letters and between the lines.

The Indian pictographs were not easily found, and had not Mr. Huffman and I both been somewhat familiar with such things, I doubt if we could have discovered them.

The only ones we saw were immediately about Clark's inscription

itself, but they are now so nearly effaced by weathering as to lose most of their detail. The scratched names and dates other than Clark's range in date from 1843 to 1899.

The gallant captain first called this Pompey's *Tower*, and it is so given on his map of 1814. He afterward refreshed his memory, probably, regarding the historic pile at Alexandria, Egypt, for which it was undoubtedly named, and which it does not in the least resemble, and then corrected his text.

Various stories are prevalent in Montana regarding this rock. A common one is that it was so called after Clark's negro servant, York, whose name is erroneously supposed to have been Pompey. Another is that it was named after a Yellowstone River steamboat hand named Pompey, who died and was buried on top of the rock, and that an inscription to that effect is found on the side of the pillar. We found no such inscription, and Clark's journal settles the question of name anyhow.

Two creeks flow into the Yellowstone at this point. One, on the south, appears to be nameless, although considerable of a creek; the other, on the north, meanders through a lovely valley, and was named by Clark "Baptist"—should be Baptiste—Creek, after Baptiste Lepage, one of his men. Baptist Creek has become Pompey's Pillar Creek.

THE BIG HORN RIVER AND BEYOND.

On July 26th the party reached the Big Horn River and camped on it a short distance above its mouth, from which point Clark ascended the stream on foot for at least seven miles.

In 1807 Manuel Lisa established a frontier trading post or fort at the junction of the Yellowstone and Big Horn rivers.

Just seventy years and one month from the time that Clark stood on Pompey's Pillar and looked over the silent and attractive landscape around him, a terrific battle was in progress on the Big Horn, or more specifically, its tributary, the Little Big Horn River, and at the day's ending Gen. Geo. A. Custer and five companies of his regiment lay stark in death, while the Indians under Sitting Bull were glorying in their victory. Just seventy years and one month from the time that Clark was walking up the banks of the Big Horn, a steamer with United States troops on board was working its way up the stream to join forces with those who, the day previous, but as yet unknown to them, had been done to death.

The party now descended the river rapidly, but were bothered by the pesky buffaloes. "I was obliged to land to let the buffalow cross over, notwithstanding an island of *half a mile in width* over which this gangue of Buffalow had to pass," says the Captain, as per footnote in Coues' volume III. [p. 1165]. These animals were to

be seen in vast numbers, and there were also elk, big horns or mountain sheep, and bears, the last very large and ferocious. This "buffalow" crossing was some miles below the present town of Glendive.

On August 3, 1806, they reached their old camp at the junction of the Yellowstone and Missouri rivers, near where Fort Union was afterward established and about where Fort Buford now stands.

The place was unendurable on account of mosquitoes, and they proceeded slowly down the Missouri until, on August 12th, they were rejoined by Captain Lewis and his men from Maria's River.

In the meantime, on August 8th, Sergeant Pryor and his party overtook them, minus the horses. Poor Pryor had had hard luck. Only two days after separating from Captain Clark, the Indians had stolen all their horses and left them afoot on the plains. One night, too, a wolf sneaked into camp and bit Pryor's hand and was killed by Shannon. Unhorsed, these men packed what they could on their backs across the country to the Yellowstone near Pompey's Pillar.

There, after the Indian fashion, they made "bull boats," or circular boats made of buffalo skins, seven feet three inches in diameter, sixteen inches deep, and capable of carrying several men, and in these they successfully floated down the river.

The day before Captain Lewis overtook Captain Clark, Cruzatte, a near-sighted, one-eyed man, in hunting had mistaken Lewis for an elk and shot him through the thigh, inflicting a painful though not dangerous wound.

On August 14th they arrive again at the Mandan villages, and here the disintegration of the expedition begins.

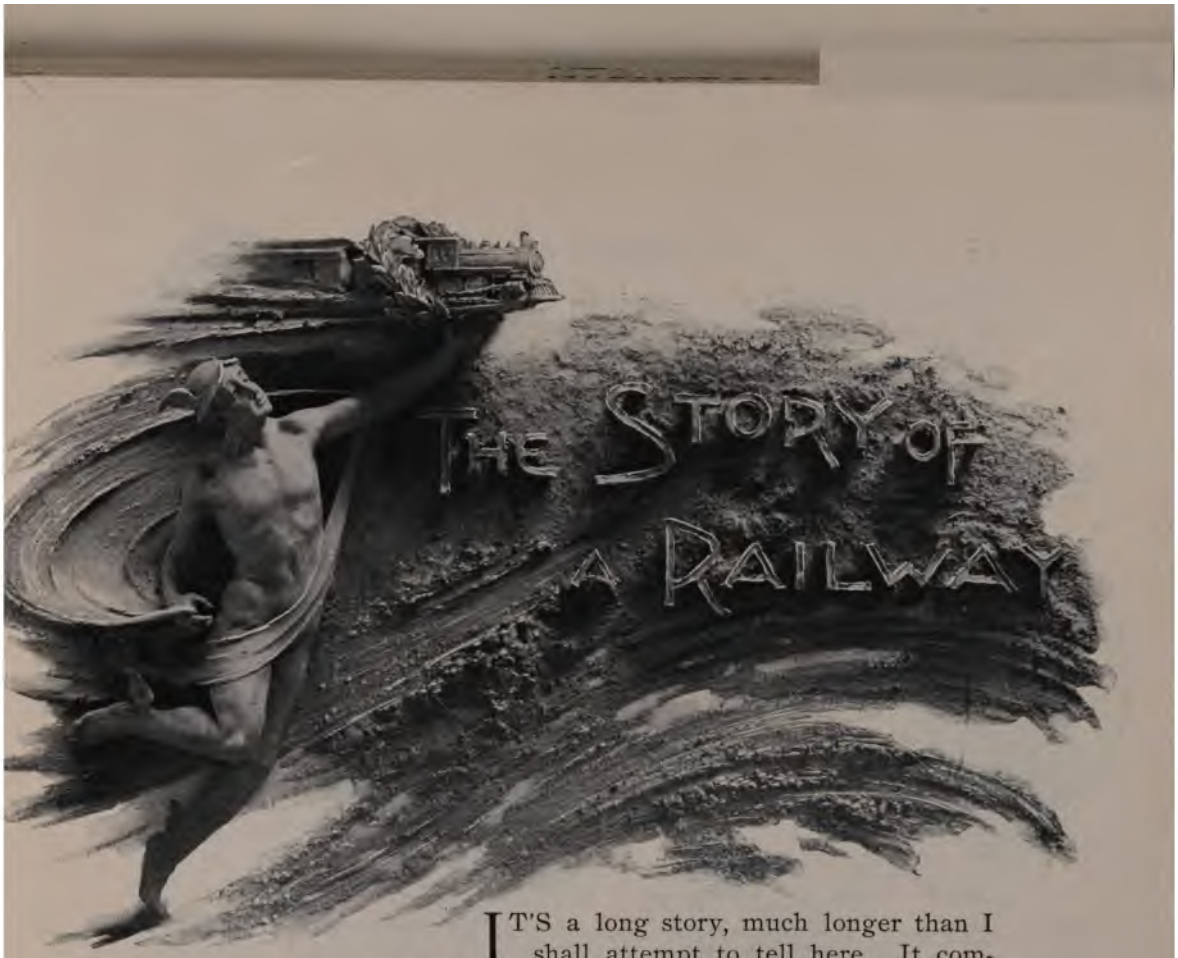
Colter wishing to return West to hunt and trap, applies for his discharge, which he receives, together with ammunition, etc., from his comrades, and then departs with best wishes from all.

Here, too, Chaboneau, the interpreter, and Sacajawea, the Bird Woman, and her pappoose, sever their connection with the party. Chaboneau's wages amounted to $500.33, including the value of a lodge and horse. His squaw received nothing.

August 17th the homeward course was resumed, and on September 20th, below the Osage River, they saw unmistakable evidences of their approach to civilization: "As we moved along rapidly we saw on the banks some cows feeding, and the whole party * * * raised a shout of joy at seeing this image of civilization and domestic life."

At twelve o'clock, noon, September 23, 1806, they rounded to at St. Louis, "and having fired a salute, went on shore and received the heartiest and most hospitable welcome from the whole village." And now they are enrolled among the immortals.

NOTE. †From an old print (or illustration) from "A Journal of the Voyages and Travels of a Corps of Discovery," etc., by Patrick Gass, published by Mathew Carey, Philadelphia, 1810. (The titles of plates marked † are referred to in the foregoing note.)



IT'S a long story, much longer than I shall attempt to tell here. It compasses more than a half century of time, includes in its annals men eminent in financial, military, and political circles in their day, many of whom became indelibly associated with the history of the country in connection with the enterprise referred to.

The story is that of the Northern Pacific Rail*road* and its successor, the Northern Pacific Rail*way*.

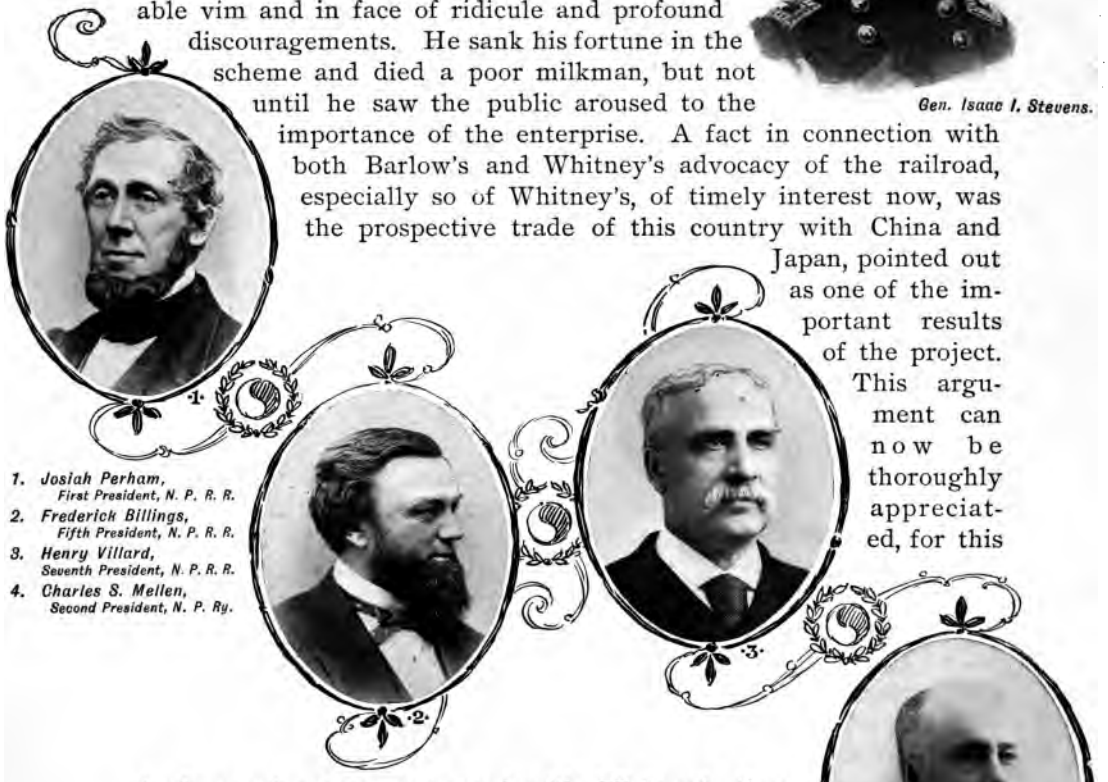
It is, probably, not known to the general public that the first Pacific railway contemplated was a northern and not a southern line; actually, to a great extent, the route upon which the Northern Pacific was subsequently constructed. There was a good reason for this. The purchase of Louisiana in 1803 and the expedition of Lewis and Clark in 1804–6 through that territory to the North Pacific Coast, made the public familiar with that region. This knowledge was increased by the operations of the old fur companies; notably, perhaps, by those of the Hudson's Bay Company and by Astor's attempt to found an American company at Astoria, at the mouth of the Columbia River. The Missouri and Columbia rivers, almost interlocking at their head waters among the Rocky Mountains, were thought to furnish an easy, natural line for railway construction. That the first road, the Union and Central Pacific, was not built along the northern route was owing to pregnant political conditions at the time.

The real promulgation of the idea of a Pacific railway seems to have been in a newspaper article by Dr. Samuel B. Barlow, a physician of

Gen. Isaac I. Stevens.

Granville, Mass., in 1834—perhaps earlier, as the date of the paper is not definitely known. Doctor Barlow advocated the northern route.

Ten years later the idea was taken up in earnest. Then Mr. Asa Whitney espoused it with remarkable vim and in face of ridicule and profound discouragements. He sank his fortune in the scheme and died a poor milkman, but not until he saw the public aroused to the importance of the enterprise. A fact in connection with both Barlow's and Whitney's advocacy of the railroad, especially so of Whitney's, of timely interest now, was the prospective trade of this country with China and Japan, pointed out as one of the important results of the project. This argument can now be thoroughly appreciated, for this trade, great now as compared with Whitney's time, is a bagatelle to what it will become with commercial expansion worked out.



1. Josiah Perham, First President, N. P. R. R.
2. Frederick Billings, Fifth President, N. P. R. R.
3. Henry Villard, Seventh President, N. P. R. R.
4. Charles S. Mellen, Second President, N. P. Ry.

In 1835 Rev. Samuel Parker, a Presbyterian clergyman of Ithaca, N. Y., made a missionary trip across the continent and down the Columbia. In an interesting volume recounting his adventures and observations he boldly says: "There would be no difficulty in the way of constructing a railroad from the Atlantic to the Pacific Ocean."

Jay Cooke.

It seems to me, however, that the *germ* of this idea was publicly enunciated years before any of the before-named individuals gave expression to it. In the Twenty-ninth Congress, first session, House of Representatives, Docu-

ment No. 173, (1846) there is printed a memorial of Robert Mills, "submitting a new plan of roadway." This roadway was possessed of such advantages over railroads and canals, "that it must eventually be substituted in their place," in the interests of economy, etc., in "a system of intercommunication with Oregon and a commercial highway to the Pacific Ocean." This particular roadway is neither here nor there, but in Mills' memorial occur these words: "The author has had the honor of being, perhaps, the first in the field to propose to connect the Pacific with the Atlantic *by a railroad from the head navigable waters of the noble rivers disemboguing into each ocean.* (Italics mine.) In 1819 [nine years prior to the first railroad construction in this country] he published a work on the internal improvement, of Maryland, Virginia, and South Carolina, connected with the intercourse of these States with the West." In this memorial there is a lengthy extract from that work. It appears that Mills' idea in 1819 was to use, apparently because of expediency and less expense, the Missouri and Columbia rivers as far as possible, and connect their head waters *by a railroad.* While this is by no means the Pacific Railroad idea in its entirety, it seems to me that it exists in embryonic form at least, and that Mills should receive his just credit for it.

Whitney nearly succeeded at one time (1848) in having a bill passed by the United States Senate favorable to his project.

Following Whitney's abortive efforts, Edwin F. Johnson, a native of Vermont, became the next apostle of the enterprise. Johnson was an engineer of splendid reputation, a practical railway builder, had studied the subject thoroughly, was convinced of its wisdom and practicability, and was able to give to the whole movement an impetus it had not before possessed, and to place it upon a much higher plane in public discussion and estimation.

Johnson seems to have been primarily responsible for the inauguration of those great expeditions known as the Pacific Railway Surveys by the United States Government in 1853. At that time, however, the feeling between the North and South upon the slavery question was at white heat, and political considerations came in to complicate the question. Congress, therefore, made appropriations for five expeditions to explore the West to the Pacific Coast, along the lines of the 32d, 35th, 38–39th, 41–42d, and the 47–49th parallels of latitude, to determine the question of the best route for a transcontinental railway.

These surveys and explorations were under the control of the War Department. Many of the ablest engineers of the army were detailed to duty in connection with them. The names of many men, who figure in the Pacific Railway reports (of which there were some thirteen large volumes, illustrated with cuts of scenery, Indians,

maps, profiles, etc.) as lieutenants and captains, were not long afterward known as generals in the great Civil War.

At the head of the War Department was Jefferson Davis, later the President of the Southern Confederacy.

On Detroit Lake, Minn.

Chippewa Indians at Leech Lake, Minn.

We are here concerned with the exploration of the 47th and 48th parallels only. In charge of this survey was Gov. Isaac I. Stevens of Washington Territory. He had been an army officer in the Mexican War, a member of the United States Coast Survey, and was an energetic, able man, and he conducted this exploration with consummate ability. Stevens became a brigadier general in the Civil War and was killed in 1862, at the battle of Chantilly, Virginia. Captain George B. McClellan of Stevens' party became General McClellan of the army of the Potomac; F. W. Lander became General Lander, and he too lost his life in the earlier years of the war; Lieutenants Cuvier Grover and Rufus Saxton, Jr., both were known as Generals Grover and Saxton. Lieutenant and then Captain Mullan, one of Stevens' engineers, built the well-known Mullan wagon road between Wallawalla and Fort Benton, across the Rockies at Mullan Pass, where the Northern Pacific crosses the main range.

The reports of the various expeditions were sent to Congress in 1855, and from that time to 1861, the breaking out of the Civil War, the subject was debated and *billed* and *resolutioned*, without anything of consequence being done toward actually beginning construction.

In 1862, political exigencies necessitated the immediate building of *one* road that must necessarily touch California. This of course

precluded the northern line from receiving attention, and the result was the construction of the Union and Central Pacific railroads.

From 1862 to 1867 the Northern Pacific project passed through a period of great travail. Various schemes that, practically, all came to naught, were proposed and considered.

The act of Congress incorporating the Northern Pacific Railroad Company passed the House of Representatives May 31, 1864, and was signed by Schuyler Colfax as Speaker. It was approved by Abraham Lincoln, as President, July 2, 1864. In the list of incorporators were names of men from Maine to Minnesota, Oregon, and California, noted in military, commercial, and political circles.

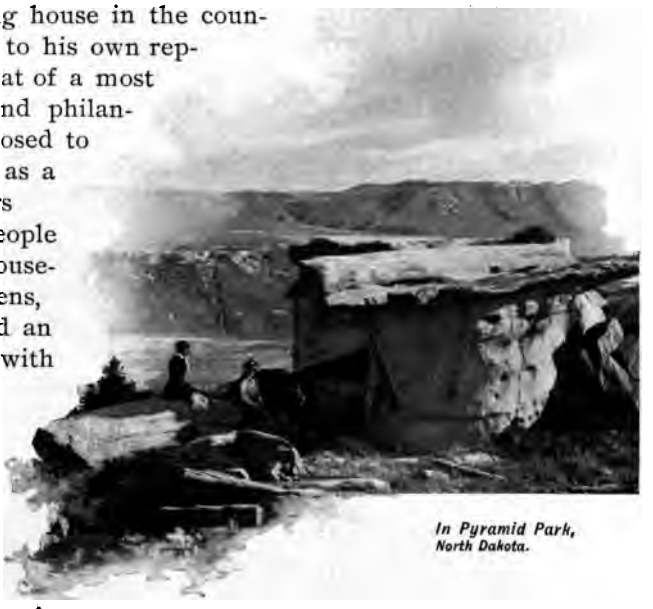
Among them were John C. Fremont of New York, J. Edgar Thompson of Pennsylvania, U. S. Grant of Illinois, Alexander Mitchell of Wisconsin, H. M. Rice of Minnesota, John A. Bingham and S. S. L'Hommedieu of Ohio, Thomas E. Bramlette of Kentucky, and J. C. Ainsworth of Oregon.

In 1867 some of the ablest railroad men of the country became interested in the matter, and surveys for location were ordered and begun under Edwin F. Johnson as chief engineer.

The roseate hue imparted to affairs was to a great extent illusory, as actual construction was not begun until 1870. In the meantime various schemes were advanced for financing the road. Congress was besieged for additional aid, and finally a bill was passed in 1871 allowing the company to mortgage its road and land grant.

An important episode in the history of the road should here be referred to.

During the Civil War the banking firm of Jay Cooke & Co., of Philadelphia, as financial agents had performed almost impossible things in floating the various bond issues of the Government. The firm had thus become the most noted banking house in the country. Mr. Cooke added to his own reputation as a banker that of a most liberal public citizen and philanthropist. He was disposed to do, in a small as well as a large way, many things that endeared him to people and made his name a household word. As it happens, the writer, as a lad, had an experience of this sort with Mr. Cooke.



In Pyramid Park, North Dakota.

Living at the time in one of the lake

cities of Northern Ohio, where Mr. Cooke's aged parents resided, I had occasion, as a messenger in a telegraph office, to deliver a telegram to Mr. Cooke, upon one of the latter's visits to his parents. It was soon after a new issue of fractional paper currency, so common in those days, had been made. The gentleman being out for a short time, I was engaged in the interim in conversation with his mother. When he entered I handed him the message, had him sign his name in the messenger book, and was turning to go, when he pulled out his pocket book, fat with crisp, new currency, and taking between his thumb and finger what he could conveniently, without counting it he threw it into my cap. This was not an isolated case, but was characteristic of the man, as I well knew from the experiences of others.

Lake Pend d'Oreille, Idaho.

Mr. Cooke's success with the government loans made those in control of the Northern Pacific in the later '60s anxious to have his firm perform the same office for the railway company. After extended negotiations, and a thorough examination along the proposed route of the railway by Mr. Cooke's engineers, his firm assumed the relation of financial agents to the company in 1870.

They advertised the road and country most thoroughly, and their statements relative to the general character of the Northern Pacific region for settlement, etc., were remarkably true and accurate, as time has amply demonstrated.

As stated, construction began in 1870, but before touching upon that phase of the enterprise, let us briefly glance at the country as it was before the iron horse penetrated the prairies and mountains.

The six States and Territories which the Northern Pacific was the more particularly to pass through or touch had, in 1870, a population of something more than 600,000, of which Minnesota alone contained nearly seventy-five per cent, or considerably more than 400,000. This population was not in a chain or line of continuous settlement. Far from it; save the older and larger communities in Eastern Minnesota, it was, for the greater part, in the form of isolated hamlets and towns, with wide intervals of plain, mountain, and prairie, roamed by the Indian, buffalo, elk, and deer. In some parts of the Rocky Mountain region there were a few mining camps and frontier towns.

Washington and Oregon combined had only about 120,000 souls congregated mostly on the shores of the Pacific. Over the illimitable plains, between the two mountain ranges, and again east of the Rockies, there were a few trading posts, frontier forts, and Indian agencies. There was, practically, not a farm in the Red River Valley, not a sheep or a steer grazing on the Montana plains, and

Trouting in Rosebud Creek. Beartooth Mountains, Montana.

the great stretch of country, of which Spokane is now the metropolis, was

"A wide domain
of mysteries,
A land of space
and dreams—"

The Mission Range, Montana.

Hellgate Canyon. Entrance from the West. N. P. Ry. Track along the River.

All communication was by steamboat up the unimproved rivers for hundreds, or even thousands, of miles; by stage coach, and slow-moving prairie schooners.

The conditions surrounding railway construction were different from those in the East. Here the railway must be the pioneer, the settler the follower. And thus it remains, largely, to this day.

Construction began at a point in Minnesota, about twenty miles west from Duluth, in the summer of 1870, the first rails laid costing

Dr. Thayer's Buggy Thirty Years ago. Used in construction of N. P. Ry. and owned by T. H. Canfield.

$90 a ton laid down at Duluth. During the same year grading was carried on between the Columbia River, below Portland and Puget Sound, and early in 1871 there were twenty-five miles of completed railway in Washington.

In Minnesota the rails were laid, in 1870, to Brainerd, on the Mississippi River; in 1871 the line was completed across the beautiful Lake Park region of Minnesota, now the summer resort of thousands, to Fargo, on the Red River. In 1872 construction was pushed and when the financial crash of 1873 came, the rails had been laid across the Dakota prairies to Bismarck, on the Missouri River, and also between the Columbia River and Puget Sound at Tacoma.

The Northern Pacific was hard hit in the panic of 1873, and moved along in an indifferent sort of way until 1875, when, under a plan matured by Frederick Billings, a director, the company passed into bankruptcy and was immediately reorganized in better shape than ever, with C. B. Wright of Philadelphia as president.

Some statements taken from the annual report of 1876 may prove interesting.

The gross earnings were about $850,000. There were of

Completed railway	555 miles.
Locomotives	48
Passenger cars	22
Freight and miscellaneous cars	1,230

There were 13,000 persons who held stock in the company, scattered over the entire country. The population east of the Missouri River within the limits of the Northern Pacific land grant was 30,000, as against say 4,500 in 1870.

In 1875 the wheat crop raised on lands tributary to the railway — east of the Missouri River of course — amounted to 500,000 bushels, as against nothing in 1870. This was an average of about twenty bushels per acre, thus representing 25,000 acres cultivated.

During the time that Jay Cooke & Co. were advertising the Northern Pacific country and its possibilities, many attacks were made through the press and otherwise upon their statements, and much honest skepticism existed as to whether the country was really of any value.

Certain of the Northern Pacific directorate had determined that they themselves must furnish incontestible evidence that the country was a valuable one agriculturally. In pursuance of this plan, Mr. T.

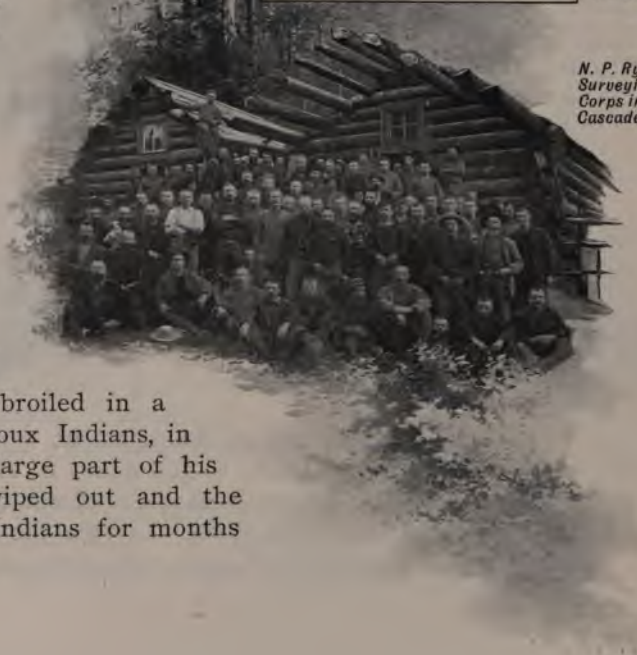
H. Canfield purchased 5,500 acres of land at Lake Park, Minnesota; Mr. Charlemagne Tower, 3,000 acres at Glyndon, Minn.; Messrs. Benjamin P. Cheney and Geo. W. Cass, 6,000 acres at Casselton, Dakota — now North Dakota — and these farms were at once broken up and put under expert cultivation. The result of this experiment showed that the Lake Park region of Minnesota and the Red River Valley contained the finest wheat lands of the world. This is a fact to-day, and its demonstration then influenced a tremendous and steady immigration to this section in the years immediately following.

During the next five years little was done in the way of extensions. The times were not propitious for it. The general *morale* of the line already built was splendidly maintained and even considerably improved. The net earnings steadily and encouragingly increased and the development of the local business was wisely fostered by the managers.

Upon completion of the road between Fargo and Bismarck it was found that the traffic there was almost entirely confined to the summer months. The line was therefore not operated in winter. It was feared that, in addition to the small amount of business offered, the delays and expense of operation, because of severe storms and drifted snow, would entail grievous losses.

The year 1876 had seen the country embroiled in a bitter war with the Sioux Indians, in which Custer and a large part of his command had been wiped out and the troops kept chasing Indians for months afterward.

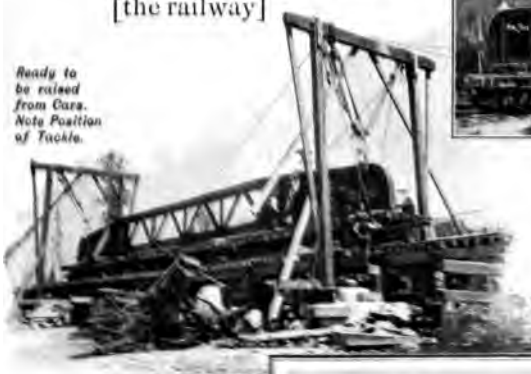
An N.P. Ry. Surveying Corps in Winter.



N. P. Ry. Surveying Corps in the Cascades.

Fort Abraham Lincoln, from which Custer had started on his campaign, was within sight of Bismarck. North and South of Bismarck along the Missouri River were other forts. It was important that the government be in as close rail and telegraphic communication as possible with these posts. The War Department therefore requested the company to operate the line during the winter of 1876–77, and this was done. A paragraph taken from the annual report for that year reads as follows: "We are gratified to be able to report that the traffic upon it [the railway] paid running expenses during the winter, and, notwithstanding the occurrence of snowstorms of unprecedented severity, our trains were delayed less than those of the New York Central Road." The illusion regarding extreme difficulty to be encountered in the winter from snow on this northern route, thus dispelled twenty-three years ago, unlike Banquo's ghost, remains down. There are good and scientific reasons why, as is the fact the trouble should be less than it is in warmer latitudes.

One Hundred Foot — 28 ton — N. P. Ry. Bridge Span on three Cars On Cars.



Ready to be raised from Cars. Note Position of Tackle.

Raised from Cars by Locomotive of car and used by Hoisting Engine of other. Note Position of Tackle.

In 1877, at which time the management of the property was placed in the hands of H. P. Sargent, a railway man of [illegible] a direct connection was secured into Minneapolis and St. Paul. Up to this time the line between Brainerd and Fargo was related with wood fuel, which cost nearly $5 per ton.

Lowered from Car Bridge P

Reducing a Grade. Last Train OLD Main New Track in Cut be Leveling.

Track Grading.

In 1879 construction was again begun and the line pushed rapidly westward from Bismarck across the elevated plains, a splendid grazing country, of Dakota and Eastern Montana. At the same time work was also being energetically carried on in Eastern Washington from the Columbia River at Wallula eastward. From this time to August 22, 1883, construction was continuously and unremittingly forced along, although under great obstacles at times. This work was prosecuted in Wisconsin, Minnesota, Dakota, Montana, Idaho, Washington, and Oregon, and in many or all of these commonwealths at the same time. It comprised main line construction, branch lines or feeders, bridges, shops, office buildings, mammoth ferryboats, telegraph lines, and the usual minor appurtenances. It included, contemporaneously, work on the plains, in valleys, among mountains.

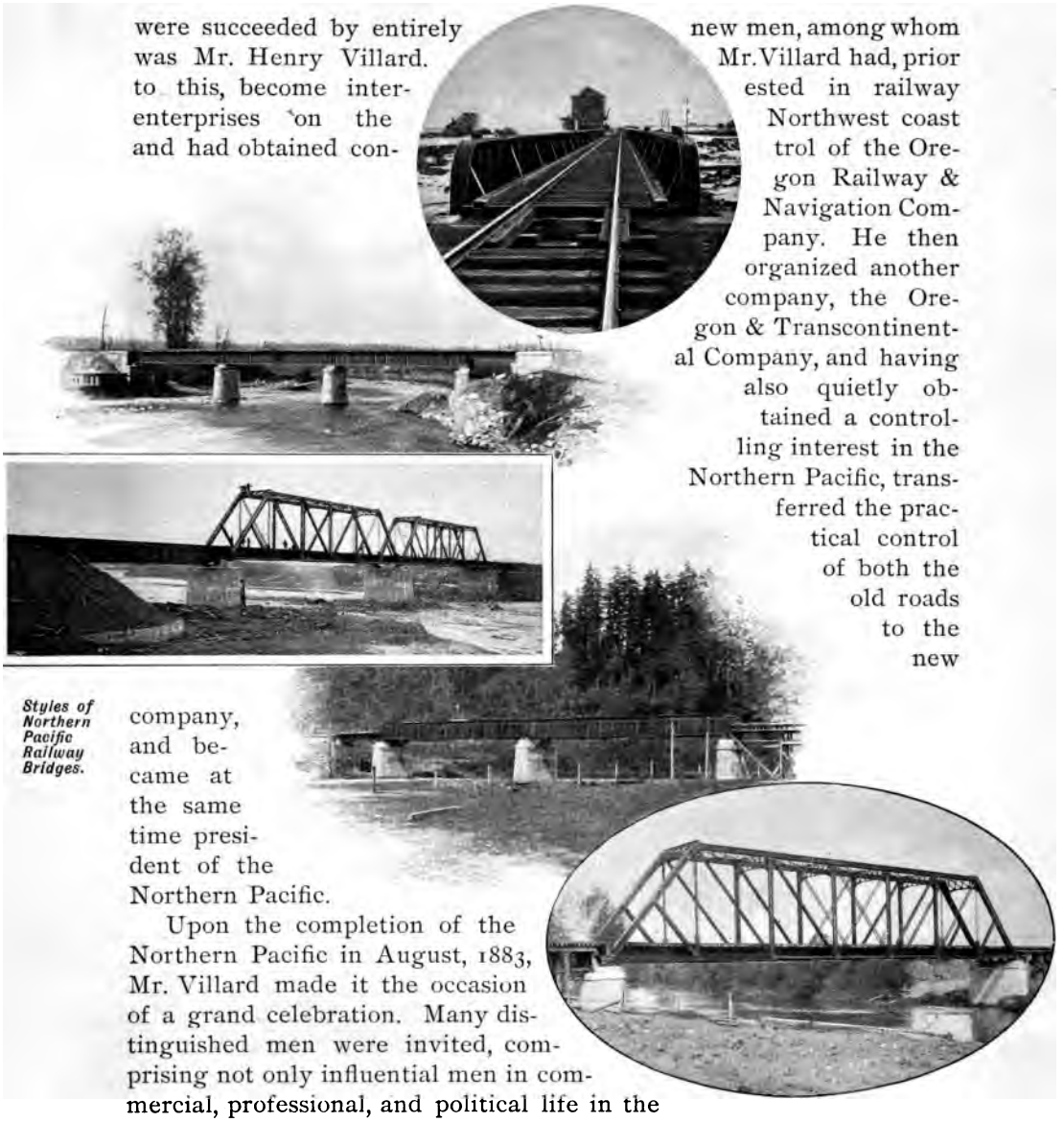
Track Laying.

Track Grading. End of a Dump.

Important items were the construction of the Bismarck bridge across the Missouri River, a steel and iron structure of three main spans, 1,400 feet long, 50 feet above high-water mark, and costing $1,000,000; a transfer ferryboat on the Columbia River, 320 feet long, having three tracks and a capacity of twenty-seven freight cars, and costing $347,000; the completion of the Bozeman Tunnel, 3,610 feet, and the Mullan Tunnel, 3,847 feet long, both across the Rockies.

Northern Pacific Stone Ballasted Tra

During this period of rapid railway building there had been some changes of administration. At the annual meeting in 1881 several of the oldest and most prominent directors resigned and



Styles of Northern Pacific Railway Bridges.

were succeeded by entirely new men, among whom was Mr. Henry Villard. Mr. Villard had, prior to this, become interested in railway enterprises on the Northwest coast and had obtained control of the Oregon Railway & Navigation Company. He then organized another company, the Oregon & Transcontinental Company, and having also quietly obtained a controlling interest in the Northern Pacific, transferred the practical control of both the old roads to the new company, and became at the same time president of the Northern Pacific.

Upon the completion of the Northern Pacific in August, 1883, Mr. Villard made it the occasion of a grand celebration. Many distinguished men were invited, comprising not only influential men in commercial, professional, and political life in the United States, but also men of note from abroad. Three hundred and fifty guests journeyed in three special trains from St. Paul and one train from Portland, and on September 8, 1883, the last spike was driven at Gold Creek, in Hellgate Canyon, Montana, amid salvos of artillery and a display of oratory. This *last* spike was the iron spike that had *first* been driven years before when construction was begun. Prominent among those present were William M. Evarts as orator, Secretary of the Interior H. M. Teller, and General U. S. Grant.

The following tables, abstracted from the annual reports of the company, show the steady growth of the infant now arrived at maturity:

TABLE OF EARNINGS AND EXPENDITURES.

YEAR.	GROSS EARNINGS.	Improvement and Betterment Expenditures.	New Equipment Expenditures.
1875-76	$ 850,000.00		
1879-80	2,230,181.81	$ 302,930.27	$ 212,032.72
1882-83	7,855,459.26	2,013,966.61	1,604,916.37
1883-84	12,603,575.58	866,058.06	5,594,672.49

TABLE OF EQUIPMENT OWNED, ETC.

YEAR.	Locomotives.	Passenger, Baggage, Express, Etc. Cars.	Freight and Miscellaneous Cars.	Miles of Road Operated.	REMARKS.
1875-76	48	56	1,196	555	
1879-80	71	45	1,751	722	
1880-81	104	68	3,021	754	
1882-83	289	174	7,500	* 2,166	* About.
1883-84	391	283	10,149	2,459	

During this period of rapid railway building, opening up new and fertile vales to the settler, who was following both the course of empire and Horace Greeley's advice, farms were opened, towns built, cities increased in population, and the business of the company rapidly augmented.

In 1881–82, the road carried 19,466 passengers; in 1883–84, 716,000; in 1876–77, there were transported 1,500,000 bushels of wheat; in 1882–83, 5,100,000 bushels; in 1880–81, there were shipped from the cattle ranges, 9,200 cattle; in 1883–84, between 30,000 and 40,000, while there were carried *into* Montana 40,000 head of young cattle for breeding purposes.

The sales of land were:

YEARS.	ACRES.
1876-77	271,000
1877-78	750,000
1882-83	534,000
1883-84	478,000

Same Trestle Filled.

Trestle before Filling.

Greenhorn Trestle (Steel), Rocky Mountains.

From 1884 to 1891 the Northern Pacific prospered. The country was rapidly settled and the live stock, timber, mining, and agricultural interests increased, *pari passu*, relatively. The mileage of branch lines was increased yearly, so that the original mileage of the line was now doubled. The earnings increased annually until for the year 1891–92 they reached nearly $25,000,000. At the same time, however, the bonded indebtedness was largely increased, necessi-

Filling a Trestle in the Cascades.

Same Trestle Half Filled.

Sluicing Down the Mountains and filling Trestle by Means of Giant Nozzles.

tating a heavy addition to annual interest charges. These, with other necessary pledges, now aggregated an onerous "fixed charge" against the property, which, however, had theretofore been met. Now came a decline in business, culminating in the financial

Same Trestle Nearly Filled.

stringency of 1893, and the company was face to face with another crisis. There was but one way to meet it and that was — a receivership. In August, 1893, the company was for the second time placed in the hands of receivers, in which condition it remained for about three years.

Constructing "Granite Trestle" (Steel), Idaho. Showing Piers.

It should be remarked that the building of the branch lines was necessarily under the same conditions as was main line construction. These lines must be the pioneers; immigration must wait upon them. This meant that several years would pass before the branches in themselves would become remunerative, although adding much, in the meantime, to the tonnage and revenues of the main road. They were in advance of the period, and time must elapse before the country grew up to them.

"Granite Trestle," showing Traveler at work.

That this policy was a wise one has been fully demonstrated. When the panic came, however, and with it receivers, it was at once seen that a complete readjustment of finances and securities must be made. During the years of construction interest rates were high, and the company's bonds and stocks bore interest at the rate of 6 per cent and a small portion of them at 7 per cent. With the decline in income the interest and other fixed charges did not

1. *West-Bound Transcontinental Express near Butte.*
2. *East-Bound Transcontinental Express.*
   On Stone Ballasted Track, going 70 Miles per Hour.
3. *A Freight Train Climbing the Rockies.*
   Three Locomotives Attached.
4. *East-Bound Northern Pacific Railway Transcontinental Train.*
   Rounding Jumbo into Hellgate Canyon.
5. *Transcontinental Express.*
   Crossing Marent Trestle, Rocky Mountains.

decline, and this fact, making yearly deficits certain, forced the receivership. These branches being, most of them, constructed under separate charters, passed at first into separate but sympathetic receiverships, but finally all lines were merged into one receivership.

Under the receivers, the improvement of the property, previously begun, was wisely continued. This consisted of grade and curve revisions, substitution of steel for wooden trestles, filling in with earth of many bridges and trestles, widening the railway embankment and thoroughly ballasting same, replacing old with new and heavier steel rails, lining tunnels with concrete, together with the replacement of old by new and heavier motive power.

Prior to the receivership, there had been eleven quarterly dividends paid upon the preferred stock, amounting to more than $3,600,000.

September 1, 1896, the receivership terminated, and the Northern Pacific Rail*way* Company succeeded, through foreclosure proceedings, to the property and franchises of the Northern Pacific Rail*road* Company, with E. W. Winter of St. Paul as president.

Things seemed auspicious for the new company. The financial tidal wave that had played havoc with so many large business enterprises all over the country was receding; the company's finances seemed to have reached a rational basis, and the fixed charges to be reduced to a figure easily within the power of the company to meet; business was good and the earnings large; the physical condition of the property in better shape than ever before.

The debit side of the ledger showed capital assets (real estate, track, terminals, equipment, etc.) of nearly $308,000,000, and miscellaneous assets (various funds, securities, etc.) of $13,000,000, or a total of almost $321,000,000. The liabilities consisted of capital stock, mortgage debt, and bonds of the old company assumed, amounting to $316,000,000, and general and contingent liabilities (pay rolls, taxes, accrued interest, and certain reserve funds) of nearly $4,500,000. The "fixed charges" had been scaled down to about $6,000,000 annually, while the gross earning for 1896–97 (ten months only) were nearly $15,000,000. The securities previously bearing interest at 6 or 7 per cent, now bore interest at 3 or 4 per cent.

The anticipation has proven true, and prosperity has followed the fortunes of the new corporation. Earnings have constantly increased and comparative operating expenses decreased; new and valuable extensions have been made, and all the feeder lines attached to the old company have been purchased by the new at remunerative figures; extensive improvements have been made to the property, and large accretions to the motive power.

In 1897 President Winter was succeeded by Mr. Charles S. Mellen. It is the continuing policy to apply the most economical methods of administration and operation known to the science of railroading.

In *1871* General George W. Cass, the third president of the Northern Pacific, used the following language: "The Northern Pacific Railroad can be operated and maintained at a less cost than any other railroad across the continent north of the parallel of thirty-three degrees for obvious and well-known reasons. * * * There is no problem to solve as to the success of the road after it shall have been completed. The only question after that event will be how any intelligent man of this age should ever have had any doubt about it." In this statement General Cass, an extremely conservative man of the old school, exhibited wonderful prescience.

First Locomotive on N. P. Ry.

The following table shows the fluctuations of "percentage of operating expenses to gross earnings" and how the rigid application of economical methods has verified General Cass' prophecy. The remarkably low percentage shown in the last two years has attracted attention from railway managers all over the country.

YEAR.	Per Cent of Operating Expenses to Gross Earnings.	YEAR.	Per Cent of Operating Expenses to Gross Earnings.
1879-80 (10 months)	60.	1894-95	65.
1884-85	53.	1897-98	47.
1889-90	58.	1898-99	47.

To show in a concrete and condensed manner the effect of improved methods of railroading, I give in tabular form certain results covering the three years of operation of the new company.

TABLE OF EARNINGS, OPERATING EXPENSES, MILEAGE, AND DIVIDENDS — 1896-99.

YEAR.	Gross Earnings.	Operating Expenses.	Net Earnings.	Dividends Paid.	Operated Mileage of Road.
1896-97	$14,941,818.22	$ 9,155,872.67	$ 5,785,945.55		4,379.95
1897-98	23,679,718.31	11,095,370.91	12,584,347.40	$3,000,000.00	4,349.98
1898-99	26,048,673.75	12,349,452.21	13,699,221.54	4,600,000.00	4,634.93

The following table shows the amounts expended for the years 1896-99 for new equipment:

Old and New Style Passenger Locomotives.

Newest Style Passenger Engine.

6 — Mountain Pusher.
18 — Freight Engine, Latest Style.

224-220 — Passenger Engines, Simple.
170-186 — Passenger Engines, Compound.

Old and New Style Freight Locomotives.

A Family of Engines.

TABLE OF EQUIPMENT PURCHASED.

YEAR.	Locomotives.	Passenger, Baggage, Etc., Cars.	Freight, Etc., Cars.	COST.
1896–97	6	.....	250	$ 232,029.01
1897–98	18	.....	100	278,011.33
1898–99	23	30	2,226	1,728,175.97
Total	47	30	2,576	$2,238,216.31

Electric-Lighted Dining Car.

In addition to this equipment, a much larger number of locomotives, cars, etc., are annually rebuilt at the company's shops. On June 30, 1899, there were in service 570 locomotives, 482 passenger train cars, 20,583 freight train cars, and 2,531 miscellaneous cars.

The following table may prove of interest:

TABLE OF TRACK RENEWALS, ETC.

ON MAIN LINE.	1896/1897	1897/1898	1898/1899	Total, Three Years.
Track relaid with 72-lb. steel rails — Miles	106	196	251	553
Track ballasted — Miles	112	300	440	852
New cross-ties laid	1,408,363	1,273,671	1,081,039	3,763,073
New side tracks — Miles	13	32	53	98
Track embankment widened — Miles	112	300	655	1,067
Fence constructed along right of way — Miles	107	587	260	954

On June 30, 1899, of the 4,635 miles of Northern Pacific track proper, operated, 1,885 miles were laid with steel rails weighing either seventy-two or sixty-six pounds to the yard.

During the three years under consideration, 829 bridges and trestles were replaced by earth embankment, and fifty-two by steel structures. The aggregate length of these was nearly 25.5 miles. In *1890* there were 144 miles of bridges and trestles; on June 30, *1899*, there were 10,941 bridges, trestles, and culverts, of an aggregate length of about eighty-six miles. Of this number 3,375 were steel, iron, or stone, solid and permanent structures.

One of the most interesting phases of railroading is that

relating to motive power and the movement of traffic. Here money is quickly made or lost. A locomotive is a fascinating piece of machinery. The tremendous speed of modern passenger and the tremendous power of modern freight locomotives, and the wonderful refinements of mechanical engineering necessary to accomplish the results obtained, seem like tales from Gulliver or Jules Verne.

Palace Sleeping Car. Electric Light.

Stating it broadly, the object of cutting down grades, reducing curves, and increasing motive power is to enable engines to haul heavier trains continuously, from end to end of the railway. Manifestly a certain engine can haul a heavier train over one hundred miles of level road than over a hundred miles where heavy grades are encountered. Uniformity, therefore, means a saving in operating expense and an addition to revenue.

Another important aid to the accomplishment of this object is in the building of larger freight cars. Where, a few years ago, these cars ranged in capacity from 20,000 to 40,000 pounds, they now range from 40,000 to 70,000, and 100,000 pounds. Such improvements have been made in car construction that this greatly increased capacity is obtained with very little increase, comparatively, in the dead weight of the car itself. This results, of course, in a much greater tonnage carried per car, and, with the factors before mentioned added, in a greater tonnage per train.

Observation Car. Recessed End.

Tourist Sleeping Car.

That is to say, that with grade and curve reductions, heavier motive power, and larger cars, larger and heavier trains are pulled by a given engine, and a less number of trains is therefore required to do the same amount of business, and the live or paying train tonnage is greatly increased while the dead weight or non-paying train tonnage is, comparatively, greatly decreased. Or, briefly and technically, the train *tonnage* is *in*creased while the train *mileage* is *de*creased.

which means that the income per *train* goes up and the expense per train *ton* goes down.

To the accomplishment of this result railway managers have, in late years, been forced to assiduously address themselves owing to the great reduction in freight and passenger rates.

The two tables following show the economic effects of this effort to increase the train load, etc. Where it has been impossible to so reduce grades and curves as to allow a train of certain size and weight to be hauled continuously by one engine, the obstacle is overcome by using a helper engine or engines for short distances, and thus the train is kept unbroken.

TABLE OF LOCOMOTIVE TONNAGE, WESTBOUND.

DIVISION.	TERMINI.	MILES.	GRADES.	Tons Hauled Prior to 1893 per Train.	Tons Hauled in 1897 per Train.	Tons Hauled in 1899 per Train.
Dakota						
First District	Fargo — Jamestown	92	Light	840	1,200	1,350
Second District	Jamestown—Mandan	107	Moderate	700	1,000	1,350
Yellowstone						
First District	Mandan — Dickinson	110	Heavy	425	675	1,350
Second District	Dickinson—Glendive	106	Heavy	425	750	1,350
Third and Fourth Districts	Glendive—Billings	226	Light	625	850	1,200
Montana						
First District	Billings—Livingston	115	Light	650	1,000	1,350
Second District	Livingston—Helena	123	Mountain	750	1,000	1,150
Rocky Mountain						
First District	Helena—Missoula	125	Mountain	875	1,050	1,050
Second District	Missoula—Hope	173	Mountain and Moderate	400	900	1,050

The above table shows the average number of tons in a freight train hauled by one engine, over the stated divisions, for the years given. The comparison is an interesting one, and is representative of the whole road. The divisions noted are consecutive and embody all the variety in grade and curvature to be found on the line. In order to accomplish the results attained, engines are specially designed and built to meet the requirements of the particular divisions to which they will be assigned.

New Style N. P. Ry. Coal Elevator and Bins. Side View.

For example, a very much heavier engine is used on the first and second districts than upon the third and fourth

districts of the Yellowstone division, while on the first district of the Montana division still another class of engine is employed.

The foregoing table relates to the dynamic feature of the problem, the one following to its economic phase.

TABLE OF ECONOMIC RESULTS DUE TO IMPROVED METHODS OF OPERATION, ETC.

YEAR.	Average Mileage Operated.	Total Miles Run By Freight Trains.	Average Paying Tons Per Train Mile.	Amount Received Per Mile of Trains Run	Amount Received Per Ton Per Mile.
1890	3,585	8,414,961	130	$1.84	$0.014
1895	4,469	7,189,057	164	1.84	0.011
1897	4,367	6,410,861	184	2.12	0.011
1899	4,579	6,595,298	278	2.95	0.010

It will be seen that, with an increase in operated mileage, the total miles run by freight trains has greatly *de*creased, while the train load and revenue received has steadily *in*creased.

The revenue per *ton* however, as will be seen, has *de*creased. Had the amount received per ton in 1890 been maintained in succeeding years, the figures in next to the last column of the last table would have been as follows:

1890	$1.84
1895	2.40
1897	2.58
1899	3.89

The fact that in the face of a *de*creasing income per ton, the amount received per train mile has steadily *in*creased, is an eloquent commentary on the economic operation of the road.

It is a striking fact that the approximate saving to the company, in dollars, of grade reductions, etc., since 1895, equals the amount of dividends declared on both the common and preferred stock in 1899. That is to say, these dividends are virtually the result of the aforesaid economies.

Through all its vicissitudes the land grant of the Northern Pacific has been what may well be termed a sheet anchor. Receiver Rouse well said: "The relation of the land grant has been, from the inception of the enterprise, a most important element in its career. The possession of the great territory granted by the government has always been used to justify a claim for credit on behalf of the securities of the corporation," and, it may be remarked, successfully. The approximate number of acres earned by construction of the road was nearly 47,000,000. On June 30, 1899, there were still unsold 23,500,000 acres. It will be seen at a glance that a tremendous population will eventually be maintained here.

On June 30, 1899, the operated mileage of Northern Pacific and proprietary lines was 4,962.52 miles. The main line, in two stems, extends from St. Paul and Minneapolis, Minn., through St. Cloud and Little Falls, and from Ashland, Wis., through Superior, Duluth, and Brainerd, to Staples; thence west through Jamestown, Moorhead, Fargo, Bismarck, Dickinson, Glendive, Miles City, Billings, Livingston, Helena, Butte, Missoula, Spokane, North Yakima, Ellensburg, Seattle, and Tacoma, to Portland, Ore. The most important branch lines extend from Wadena, Minn., southwest to Fergus Falls and beyond; from Winnipeg Junction, Minn., through Crookston, Minn., and Grand Forks and Grafton, N. D., to Winnipeg, Manitoba, at which point other ramifications are found; from Fargo, N. D., southwest to Edgeley; from Jamestown, N. D., north to Leeds; from Livingston, Mont., south to Yellowstone Park; from Missoula, Mont., northwest to Wallace, in the Cœur d'Alene country, and south to Hamilton and Grantsdale, in the Bitter Root Valley; from Spokane, Wash., south through the Palouse region to Lewiston, Idaho, and the Clearwater and Buffalo Hump country; from Pasco, Wash., south into the Walla Walla country; from Seattle, Wash., north to the international boundary.

Northern Pacific Furniture Car. Capacity 60,000 lbs.
Logging Car, Pacific Coast.
Weed Burner.
Northern Pacific Stock Car.
Rodger Ballast Car.
Northern Pacific Freight Car.
Northern Pacific Grader.

And what has the railway done for the country? The population of 600,000 in 1870 had become nearly 2,400,000 in 1890, and it

will now aggregate at least 3,000,000. Four large cities on the eastern border, St. Paul, Minneapolis, the Superiors, and Duluth; four in the middle zone, Butte, Helena, Anaconda, and Spokane, and four on Pacific tide water, Victoria, Seattle, Tacoma, and Portland, have risen to great commercial centers.

The iron mines of Wisconsin and Minnesota and the gold, silver, copper, and coal interests of North Dakota, Montana, Idaho, Washington, and Oregon have become of national importance. From Minnesota, North Dakota, and Manitoba the world is supplied with its choicest butter, wheat, and flour; the Dakota and Montana ranges pasture as fine sheep and cattle as the eastern markets supply; the fruits of Montana, Idaho, Washington, and Oregon have a national reputation and are now shipped to feed the bluestockings and bean eaters of the far-away East and Boston. During the year 1899 Minnesota, North Dakota, and Montana shipped 159,000,000 bushels of wheat; Washington and Oregon raised, for the same year, 48,600,000 bushels of the same cereal; and Montana, the greatest copper region in the world, produced precious metals to the value of more than $51,000,000 during 1898.

Northern Pacific Railway Station, North Yakima, Wash.

Northern Pacific Railway Station, Little Falls, Minn.

Northern Pacific Railway Station at Fargo, N. D.

Between Tacoma and Seattle, and Victoria, B. C., the Northern Pacific Railway Company operates the steamer Victorian, an exceedingly popular steamer, and first-class in every respect, to take care of the growing local traffic on Puget Sound.

On the shores of the Pacific a great commerce has sprung up, and the wheat of interior Oregon and Washington is carried to the Puget Sound and Columbia River ports, from whence it is shipped as flour to Australia, Hawaii, Japan, China, South America, etc.

Washington timber and shingles are being shipped in train loads across the continent, and also to foreign countries, and North Pacific Coast fish canneries ship their products in every direction.

In the beginning of this article it was stated that the Oriental trade was, from the first, considered an important matter. I wish to emphasize this. From the inception of the enterprise to the present time, through all changes of management, the development of the Asiatic commerce has been looked forward to, and fostered.

In 1860 Mr. Aldrich, from the Committee on Pacific Railroad, reported to the House of Representatives that the Northern Pacific route would be the shortest line across the continent and also the shortest *combined land and water route* between Europe and Asia. He called particular attention to the trade that was to be expected in teas, spices, furniture, silks, and goods of cotton manufacture.

Upon the completion of the Northern Pacific Railroad immediate steps were taken to stimulate this trade with the Orient, and in 1892 the Northern Pacific Steamship Company was organized. This was the third Trans-Pacific Company established on the Pacific Coast and the first one operating between Puget Sound ports and China and Japan, and to its efforts is due almost entirely the upbuilding of this commerce on the North Pacific Coast. Not until 1896 did another line engage in the Puget Sound-Asiatic trade, and then the current of Oriental commerce, like the Japan Current or Kuro Siwo itself, was flowing tranquilly across the Pacific to the shores of Puget Sound, and without any flourish of trumpets. The convergence of meridians

N. P. Trans-Pacific Steamer and Dining Saloon on same.

renders the Northern route much the shortest between United States ports and Yokohama and Kobe, Japan; Shanghai, Hongkong, and other ports in China, and the Philippine Islands, and the land-locked harbors of Puget Sound are of great depth and have ample wharf facilities.

The imports are principally tea, silk, curios, matting, and straw braid. The exports consist of cotton, cotton goods, tobacco, machinery and hardware, wheat, flour, lumber, etc. The first cotton shipments via any Northern route for any oriental port were made over the Northern Pacific Railway, and this line was the *pioneer* of all lines in tobacco shipments.

The wheat, flour, and lumber are shipped mostly from Washington and Puget Sound, although considerable flour has been shipped at various times from North Dakota and Minnesota.

From year to year there is of course more or less fluctuation in this commerce. The varying conditions of the trade itself, the changes in tariff, rates, etc., affect it, and during the last year or more the Spanish-American and Philippine wars have considerably disturbed it. Another factor that has greatly reduced the amount of the business in recent years, is the depreciation of silver. Japan being on a silver basis, this had the effect of doubling the cost of exportations to that country and of course thus reducing the volume of exports.

From an east-bound tonnage of about 14,000 tons carried by the Northern Pacific in 1893, this traffic has increased to much more than double that amount in recent and favorable years. From 110 tons of west-bound tonnage in 1895 the road now transports from 12,000 to 20,000 tons per annum, depending upon the fluctuations of commerce.

It should be understood that this does *not* include the oriental shipments that originate on, and are destined to, North Pacific Coast points and which constitute by far the larger part of the steamships' cargoes. It covers simply the *overland* oriental tonnage.

My tale is told. I hope that it will serve to faintly indicate what it means to plan, build, and equip a great line of railway such as the Northern Pacific, across mountains and — at the time — unproductive plains.

NEW FOUNTAIN GEYSER

Plays from three vents to a height of 100 to 200 feet, for an hour at a time.

IT IS now just thirty years since it became actually and generally known that such a place as Yellowstone Park existed. The stories of the old mountain men and trappers, vague and indefinite as they were in many details, were not accepted at par by the public.

In 1870, however, the question was determined forever by the now well-known Washburn expedition which made an extensive exploration of the country.

Until the year 1882 it was considerable of an undertaking to visit the park. In 1882–83 the Northern Pacific Railroad was completed to Livingston and Cinnabar, at the park boundary. Since the railway reached the park, between 100,000 and 150,000 people from all corners of the world have visited the strange land, and gone home thrilled and mystified by what they have seen.

It is safe to say that ninety-nine per cent of those who have visited this spot have hoped that they might see it again, and many have, indeed, thus seen it. Two years ago, while in the park, I met a physician of Chicago who had just finished the park tour, but, not satisfied with the time given to it, was on the way around a second time, in more leisurely fashion, and how he was enjoying it. Some weeks later, in a Pullman, I met a lady from New York who had prolonged her stay at the Grand Canyon to three or four days, and, full of enthusiasm, regretted her inability to repeat the trip.

In 1899 I made my fifth trip to the park. I can truthfully and, to myself, surprisedly say that no one trip revealed to me the grandeur of the park as did the last one. I had scarcely conceived the cumulative effect of these visits, repeated at different seasonal times and with various means of transportation.

Those who have made repeated visits to Niagara Falls, who have viewed the great cataract from all points, and at different times and seasons, who have lingered about it and studied it, are they who have best caught the spirit of the place, who know it the best, and who enjoy it the most.

It is so with Yellowstone Park — those who love it best, who talk of it in the most glowing terms, are they who, seeing the most of it, know the most of it, having absorbed its beauties as one absorbs the beauty of a fine painting, or of a superb piece of statuary, by much study of it.

By arranging for stop-overs, which can be done at no additional expense for transportation, the tourist can see more thoroughly the objects seen in the usual tour, and may also explore many places impossible to see in a limited period. The geysers, with a few exceptions, like ourselves, are not always punctual to the minute or hour, and an extra hour or two, or a day at the right time and place, may result in adding immensely to one's enjoyment.

Terraces at Mammoth Hot Springs, and Bunsen Peak.

There is something in this great park to appeal to everyone, something to measure up to each man's and each woman's capacity for appreciation of scenic beauty and grandeur.

I conceive that those who stand unmoved at the flight of a geyser — for I understand that there *are* a few such — may find a supreme delight in watching the bears near the hotels, in their frolics; that those unable to appreciate the marvelous beauty of Emerald Pool, may enjoy the ride through Gibbon Canyon; that the man who may not relish the climb among the Hot Springs terraces, may find great sport in catching trout in Yellowstone Lake.

As I stood on the railway platform at Livingston last summer, a tourist, just going into the park, approached me. He was an elderly man with silver hair and beard, a fine-looking gentleman.

Pointing to the Crazy Mountains, seemingly in the clear morning light close at hand, he asked:

Cleopatra Terrace.

"How far away are those mountains?"

"From thirty to forty miles," I replied.

"Well, I declare," said he, "it seems as if you could walk right out to them. I am from New York State, but I never saw real mountains like those. How high are they?"

"Three thousand to five thousand feet above us."

"Is that snow on them?"

"Yes, there is always some snow there, a little more than usual this year though."

He looked at them intently, absorbed in the thoughts passing through his mind. For sixty years or more he had lived, and was now seeing things about which he had read, but had never fully understood. Now that man, even if he failed utterly to grasp the meaning and enjoy the sight of the greater things in the park, the canyons, geysers, etc., was going to get his money's worth out of the mountains and lakes and rivers, and flowers and animals, and to return home and regale his neighbors with tales of Wonderland.

The ordinary tourist spends five and one-half days in the park. This enables him to see, to a greater or less degree, dependent somewhat upon himself, the more pronounced features of it.

There is, however, no compulsion about this. One can take as much time as one wishes, and thus travel as leisurely as desired. No one need be rushed through Wonderland. The usual tour is the result of years of experience, taking into consideration — a very important item — the question of expense for the average person.

MAMMOTH HOT SPRINGS.

At this place, known also as Fort Yellowstone, the ingoing and outgoing streams of tourists meet. The afternoon's climbing over the terraces opens the vision somewhat, and after viewing Jupiter and Pulpit terraces, Liberty Cap, Giant's Thumb, Cleopatra, Narrow Gauge and Angel terraces, Bath Lake, Orange Geyser, etc., one begins to understand what Wonderland means. If an extra day is spent here, a ride on horseback or a walk to Gardiner Canyon and Fall, three miles away to the south, will prove to be time well spent. This canyon ranks next to the Grand Canyon, and the Fall is a gem. Electric Peak or Sepulcher Mountain can be climbed from here, but a guide will be needed, and the ascent of the former peak means a good stiff bit of mountaineering.

Devil's Kitchen. Mammoth Hot Springs.

At Silver Gate. Near Mammoth Hot Springs.

THE GEYSERS.

At Norris Geyser Basin, the first geysers—not the best—are seen. En route, beginning with Golden Gate, some interesting scenery has been passed. The Gate is a short canyon pass between Bunsen Peak and Terrace Mountain, where the road is a blasted, an artificial one, entirely. The canyon walls are vertical and imposing for their height, some three hundred feet. Emerging from the canyon a wide, grassy valley, Swan Valley, spreads before us. The Gallatin Range, with Electric Peak to the north, rises just beyond it.

Through open valley and stretches of timber, beside gurgling streams where the trout hide, past ravishing lakes, at the base of the wonderful Obsidian Cliff, the road winds to Gibbon River, on the bank of which stands the collection of tents constituting the lunch station, and just beyond, over a little divide, lies the Norris Basin.

The hour and a half passed here is full of fresh, interesting experiences. There are several geysers here, and if only they will perform while we linger, we will remember this basin kindly. The Monarch is the greatest geyser here, and its display a fine one.

The Minute Man plays continuously at intervals of fifty seconds. The old Black Growler in 1899 subsided to a great extent, another steam geyser breaking out close by and draining its reservoir.

Congress Spring, Hurricane Geyser, the Devil's Ink Pot, New Crater Geyser, etc., are prominent objects here.

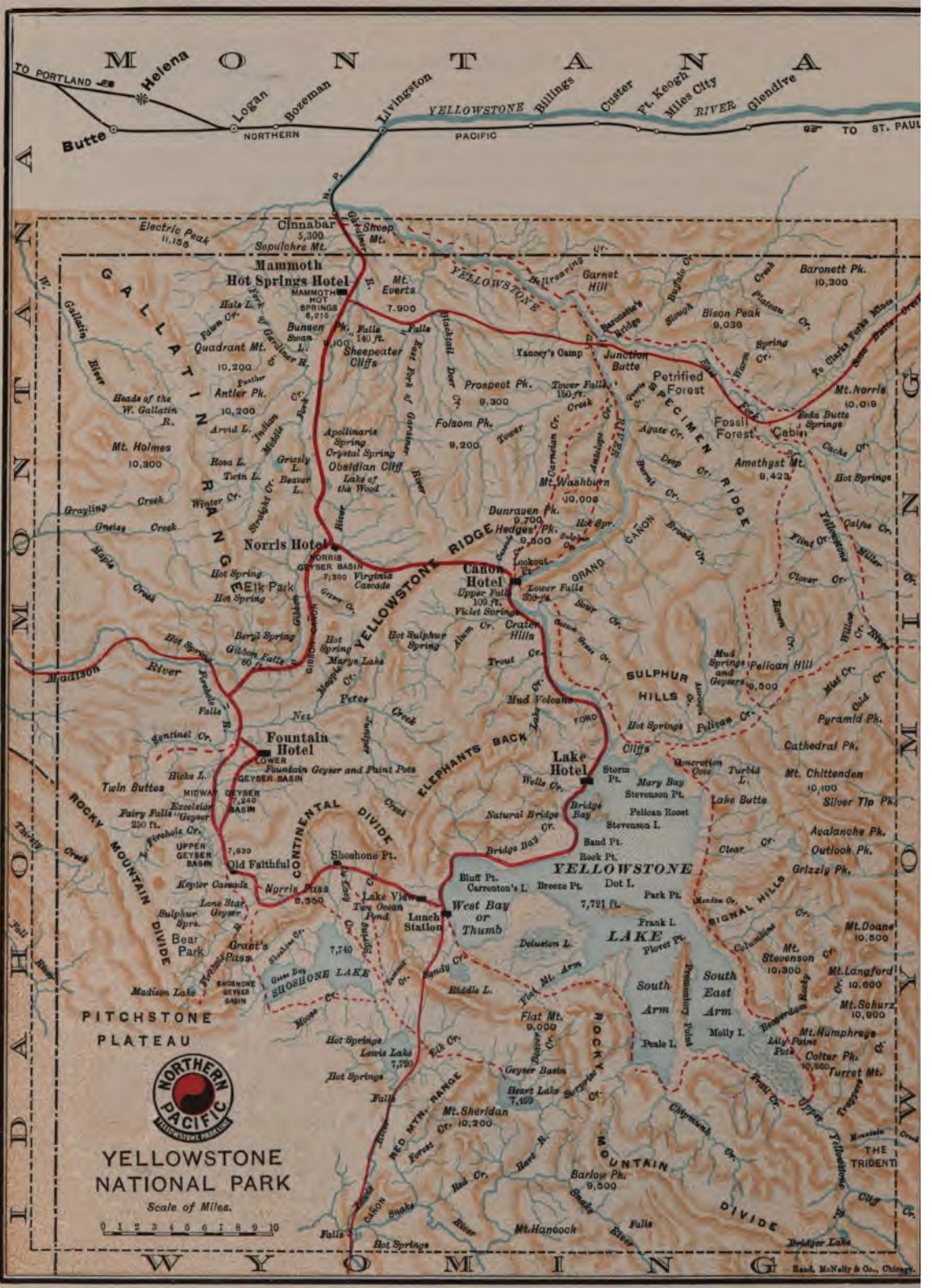
In Golden Gate.

The afternoon's drive is through Gibbon Canyon and alongside the river of the same name, thence by the side of the Firehole River to the Fountain Hotel. At this excellent hotel the tourist remains two nights, as usually planned.

The Great Fountain Geyser, one of the largest and finest geysers in the whole park, is situated about a mile and a half distant from the hotel, and is surrounded by many other pools and springs of exquisite character.

The Mammoth Paint Pots and Clepsydra Geyser are on either side of the Fountain—not Great Fountain—Geyser. The former

Electric Peak.


MONTANA
TO PORTLAND
Helena
Butte
Logan
Bozeman
Livingston
YELLOWSTONE RIVER
Billings
Custer
Ft. Keogh
Miles City
Glendive
NORTHERN PACIFIC
TO ST. PAUL
IDAHO
WYOMING
Cinnabar 5,300
Sepulchre Mt.
Electric Peak 11,155
Sheep Mt.
Mammoth Hot Springs Hotel
MAMMOTH HOT SPRINGS 6,215
Mt. Everts 7,900
Garnet Hill
Baronett Pk. 10,300
Bison Peak 9,036
Junction Butte
Petrified Forest
Fossil Forest
Cabin
Mt. Norris 10,019
Amethyst Mt. 9,423
Quadrant Mt. 10,200
Antler Pk. 10,200
Mt. Holmes 10,300
Sheepeater Cliffs
Prospect Pk. 9,300
Folsom Pk. 9,200
Apollinaris Spring
Crystal Spring
Obsidian Cliff
Lake of the Wood
Mt. Washburn 10,008
Dunraven Pk. 9,700
Hedges' Pk. 9,500
Norris Hotel
NORRIS GEYSER BASIN 7,300
Virginia Cascade
Elk Park
Canon Hotel
Upper Falls 109 ft.
Lower Falls 308 ft.
Crater Hills
Hot Sulphur Spring
Beryl Spring
Gibbon Falls 80 ft.
Marys Lake
Mud Volcano
Pelican Hill 9,500
Pyramid Pk.
Cathedral Pk.
Mt. Chittenden 10,100
Silver Tip Pk.
Avalanche Pk.
Outlook Pk.
Grizzly Pk.
Mt. Doane 10,500
Mt. Stevenson 10,300
Mt. Langford 10,600
Mt. Schurz 10,900
Mt. Humphreys
Colter Pk. 10,500
Turret Mt.
Fountain Hotel
LOWER GEYSER BASIN
Fountain Geyser and Paint Pots
MIDWAY GEYSER BASIN 7,240
Twin Buttes
Fairy Falls 250 ft.
UPPER GEYSER BASIN 7,830
Old Faithful
Shoshone Pt.
Norris Pass 8,350
Lake View
Two Ocean Pond
Lunch Station
West Bay or Thumb
Lake Hotel
Bridge Bay
Natural Bridge
Stevenson I.
Sand Pt.
Rock Pt.
Dot I.
Park Pt.
Frank I.
Plover Pt.
Lake Butte
Turbid L.
Concretion Cove
Mary Bay
Stevenson Pt.
Pelican Roost
Bluff Pt.
Carrenton's I.
Breeze Pt.
YELLOWSTONE LAKE
South Arm
South East Arm
Peale I.
Molly I.
Flat Mt. 9,000
Riddle L.
Delusion L.
Flat Mt. Arm
Geyser Basin
Heart Lake 7,460
Mt. Sheridan 10,200
Barlow Pk. 9,500
Mt. Hancock
Bridger Lake
Lewis Lake 7,720
Hot Springs
Bear Park
Grant's Pass
Madison Lake
SHOSHONE LAKE
SHOSHONE GEYSER BASIN
PITCHSTONE PLATEAU
GALLATIN RANGE
YELLOWSTONE RIDGE
SPECIMEN RIDGE
SULPHUR HILLS
ELEPHANTS BACK
CONTINENTAL DIVIDE
ROCKY MOUNTAIN DIVIDE
SIGNAL HILLS
RED MTN. RANGE
THE TRIDENT
NORTHERN PACIFIC
YELLOWSTONE PARK LINE
YELLOWSTONE NATIONAL PARK
Scale of Miles.
0 1 2 3 4 5 6 7 8 9 10
Rand, McNally & Co., Chicago.

are curious mud or clay deposits of variegated and delicate colors, and always boiling. The latter is one of the superb geysers, playing from four vents and to moderate heights, but is an infrequent performer.

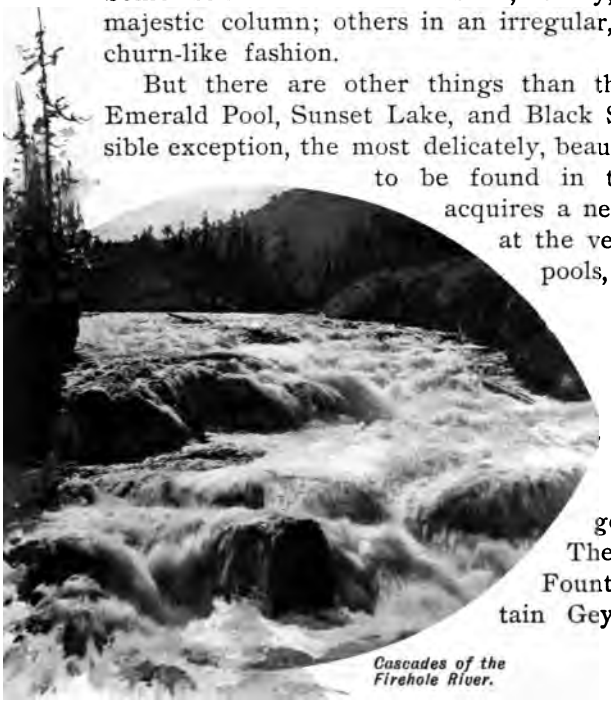
Four miles away lies Midway Geyser Basin, where Excelsior Geyser, Turquoise Spring, and Prismatic Lake are found. Excelsior Geyser, as is now well known, has not been in eruption for many years.

The Upper Geyser Basin is the goal of the tourist, so far as the geysers are concerned. There are here about a dozen geysers that expel the contents of their reservoirs to heights ranging from one hundred to two hundred and fifty feet. There are as many more that play to elevations less than one hundred feet. This family of geysers is like a large family of children; a strong family resemblance runs through all of them, but individually no two are much alike.

The Castle has a very large, castellated, siliceous cone; the Grand has none whatever, nor is there any resemblance in their eruptions. The Oblong and the Giantess each expel their contents from deep, pit-like reservoirs, but there the resemblance between them ends. The Bee Hive and Old Faithful each have cones, as entirely unlike as are their splendid columns of water and vapor. Some throw the water as straight in the air as a tree stands; others hurl it out at various angles, or even in arches. Some send it forth in a solid, steady, majestic column; others in an irregular, churn-like fashion.

Firehole River Crossing at Excelsior Geyser.

But there are other things than the geysers here. Emerald Pool, Sunset Lake, and Black Sand Pool are, with one possible exception, the most delicately, beautifully colored bowls of water to be found in the park. The word *color* acquires a new significance as one stands at the verge of these truly heavenly pools, shut in among mountains.



Cascades of the Firehole River.

A NEW GEYSER.

To those conversant with the park it is well known that changes to a greater or less extent are continually taking place among the geysers and springs. The particular attraction at the Fountain Hotel has been the Fountain Geyser, near the hotel. This

Devil's Ink Pot. Norris Geyser Basin.

geyser has a basin some thirty feet in diameter, connected with another of about the same size just north of it. Much of the time these basins are full of water, thus, apparently, forming a large double crater.

In 1899 a new geyser, called the New Fountain, broke out in the north basin, resulting in a decided curtailment of the old Fountain Geyser's eruptions. The new geyser is not yet old enough so that its periodicity and peculiarities are fully known. Its eruptions, however, are more stupendous and much beyond those of any other geyser which the writer has seen. Excelsior Geyser at Midway Basin, the greatest geyser — when it plays — in the world, is closely approached by this new giant, in both the magnitude and the grandeur of the display.

Fairy Falls. Near Lower Geyser Basin, Yellowstone Park.

The geyser is rather spurty in character, and when in full operation plays from three orifices. In its general action it is not unlike the Fountain or the Great Fountain. It will boil furiously and throw the water quite regularly to a height of ten to fifteen feet. Then, becoming semi-quiescent for a few moments, it will again break loose, and simply hurl into the air, with almost inconceivable force, a solid body of water of immense bulk, to a height of fifteen to thirty feet. Then changing again it will send upward an enormous volume of water to a height of 100, 150, or even, in exceptional spurts, 200 feet.

After a period of momentary quiescence, the geyser will often break out with a violent explosion, when the scalding flood, transformed into millions of white, beautiful beads of crystal and spray, is sent in all directions, to all heights, at all angles, from the three apertures. The water is all torn to pieces and is thrown out and comes down in a perfect avalanche. The geyser then is a very leviathan at play. It throws out pieces of geyser formation, bits of trees, and geyser eggs, as they are called, small, white, rounded, polished stones.

When the eruption ends it comes abruptly, at once, not as the Great Fountain's, with a series of dying, tremendous throbs, as if its great heart were broken. The eruption ceases, the great body of water drops rapidly down into the central cistern and runs into it from the geyser knoll in pretty little cascades, until the surplus is thus carried away and the water level outside of the basin is lowered. Then it is all over.

At times there are large quantities of steam which float away

in beautiful vapory forms and often obscure the higher levels of the water column.

YELLOWSTONE LAKE AND GRAND CANYON.

Leaving the geysers, the tourist crosses the Continental Divide twice and then comes out upon the shore of Yellowstone Lake.

This drive is one that will be remembered. The road, well made and well kept, winds among the mountains and, notably at Shoshone Point, affords some pictures of mountain scenery that will live forever.

Giant Geyser.

After leaving the lunch station on the west arm of the lake, the road skirts the western shore for nearly the entire distance to the Lake Hotel, as it is known colloquially.

Of this beautiful lake Rev. Dr. E. P. Hill of the First Presbyterian Church, Portland, Ore., just after seeing it, spoke as follows in a sermon on "Beauty in Nature":

"I want to say a word about Yellowstone Lake. Think of a lake more than 7,000 feet above the sea level, edged with snow-capped mountain peaks, dozens of them, almost as high as Mount Hood. Think of standing on the shore of that superb body of water and seeing bears walking composedly through the forests and graceful deer coming down fearlessly to the brink and stepping in without thought of danger, as if the day promised by the prophet had come, when man and beast of forest shall dwell together. The lake looks like a pavement of lapis lazuli. The mountains are covered with pink and purple and gold. The sky is an ocean of lavender, in which great white ships are sailing off to the city of God. Do you wonder that we said one to another, 'Down there in the cities, where sin and sickness and sorrow stalk the streets, and men are engaged in their never-ending strife, we have seen the world as man has transformed it. Here, in this place of peace and purity and beauty, we see the world as God made it.'"

The hotel is situated near the outlet of the lake, and the fishing, either in the lake or the river, is something phenomenal.

Leaving the lake, the tourist passes Mud Volcano, and Chrome Spring at Sulphur Mountain, and approaches that rare combination the Upper Fall, the Lower Fall, and the Grand Canyon. The falls are between a quarter and a half mile distant from each other, and each is within walking distance of the Canyon Hotel. The Upper Fall is 109 feet high, the Lower 308 feet, and there is not the remotest similarity between them.

Firehole Spring, Lower Geyser Basin. White Dome Geyser in distance.

Regarding the Canyon let me again quote from Dr. Hill:

"And now I want to say a word in regard to the Grand Canyon. You stand on Inspiration Point and look down 100, 200, 300, 1000 feet, and there, away below, is a green ribbon, worked in and out as if to hold together the lower edges of the canyon's walls. It is the Yellowstone River. You look off toward the south and see, in a sort of recess, a little column of white. It is the Great Fall of the Yellowstone, 308 feet high. You examine the slanting walls of this tremendous canyon and you see such a display of color as the eye of man never looked upon. Someone has said that it looks like a blown-up paint shop. Just there to the right some huge pots of white and yellow and red paint have been tipped over, and it has flowed right down in parallel streaks to the water's edge. Farther along is a gigantic tower carved out of a solid crimson rock. Here to the left all along are turrets and castles and cathedrals, there a Parthenon, over there St.

Fan Geyser.

Cascade Geyser. *Daisy Geyser.*

Oblong Geyser.

Giantess Geyser.

Mark's glittering in gold, there Taj Mahal, as white as spotless alabaster. Colors green and brown and saffron and orange and pink and vermillion and russet cover every rock until the scene is bewildering. What shall one say as he looks upon such a scene? Nature teaches us about God. Then the Grand Canyon has been cut and painted by the divine hand as if to give us some idea of John's vision of heaven. Walls of jasper, streets of gold, gates of pearl, foundation stones of emerald and sapphire, and topaz and amethyst. Yes, they are all there. Who can look upon such a scene and say there is no God and no heaven?"

BEARS IN THE PARK.

It is probably true that the bears constitute one of the very interesting features of this great park, to most tourists. It is well known that the park is a home for all animals. The protection of the Government is thrown about them, and as a result the antelope, deer, elk, buffalo, bears, etc., are free to wander as they please, unrestrained through fear of men and dogs. The bears especially seem to recognize the fact that there is no danger.

Tourists at Sulphur Mountain.

At each hotel and lunch station the refuse from the tables is deposited in a pile at a distance from the buildings or tents. These heaps are frequented by the bears and become their feeding grounds. As regularly as twilight comes so comes bruin.

Then, too, do the tourists troop out, armed with cameras, to watch the bears as they eat and scramble and growl. There is no danger, for the animals are very suspicious, and at the first unusual movement, on the part of a man or woman, will scamper off.

The larger number of the bears are of the black and brown species. There are, however, a few silver tips or grizzlies.

A Fossil Tree. Yellowstone Park.

At Norris Geyser Basin, where tourists can not remain over night, bruin flourishes. Stopping there once by special dispensation, with Larry, the Irish genius of the place, I went out in the evening to see him. As we approached the brow of the bluff below which he was supposed to be, we moved very stealthily. It was of no use. Scarcely had we gotten around the corner of the icehouse before the bears saw us. With a "woof" three of them, large black fellows, whirled and scuttled away into the timber and the night. Another scurried along through the high swamp grass toward the Gibbon River. We could easily follow him with the eye, and as he reached the river he plunged

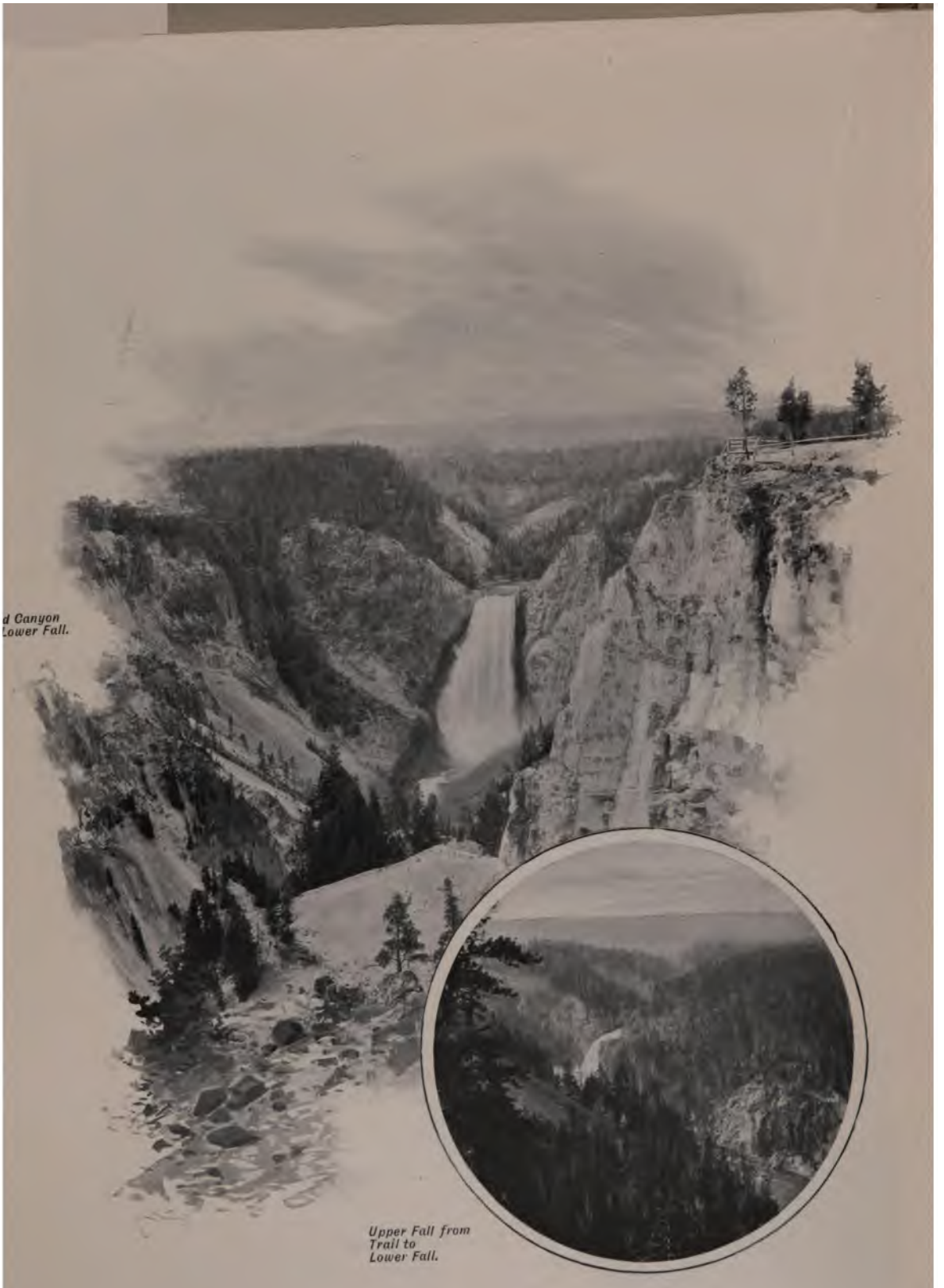
Glimpse of Yellowstone Lake and the Mountains.

right into the cold water, swam and waded across, climbed the opposite bank, and, reaching the road, waddled down it toward the woods. The soldiers there saw him, halloed at him, and, turning he again made for the river, swam it, and struck a bee line, or a bear line perhaps, for the dark shelter of the trees, where the others had refugeed.

At the Fountain Hotel the tourists first see the bears. There are several of them, most of them large, and they are very patient with tourist photographers. They come down from the timber and sprawl over the heap of empty cans and refuse, eating like so many pigs. They keenly watch their audiences, and usually at the least suspicious sound or motion make off into the woods.

Grand Canyon Wall. At Tower Fall.

Last summer I saw one monstrous black fellow there, apparently very hungry and docile. A large crowd was scattered around and six



d Canyon
Lower Fall.

Upper Fall from
Trail to
Lower Fall.

"What Did You Say?"

or seven kodak fiends were slowly surrounding him. He had not been able to approach very near to the refuse heap and was in a great quandary as to what to do. He wanted to go and eat his supper, but was afraid to venture. As the men drew gradually nearer, the expression on his face was ludicrous. It said as plainly as A, B, C: "Go away and let me alone; you are a big nuisance." After standing it for a time he finally turned slowly about and walked off in the most deliberate, disgusted manner imaginable and was soon lost to sight. Sitting on the hillside back of the Canyon Hotel one evening with a friend, we were suddenly surprised by two grizzlies who, instead of coming, as we expected, in a suspicious, stealthy manner, came over the hill and down the trail on a keen run—bear run. It was for all the world as if they were trying to

A Tame Cub.

Bears Having their Photographs Taken.

At the Evening Meal.

catch a train that was just ready to start. When they reached the garbage, they rose up on their haunches, looked around at the spectators, sniffed the air, and then turned to the business in hand. After eating for a few moments, the

smaller one did something not in keeping with the other's notions of propriety, or deference perhaps, and the latter gave him a ringing blow with his paw about the head.

Every few moments they reared up and looked about them, and finally suddenly whirled around and tore up the trail as if the Old Nick was after them. They were frightened away by the noise of a cow bell on a horse not far away that was being driven in to the corral.

Another evening, at the Upper Geyser Basin, several of us were sitting on the ground near the Daisy Geyser, waiting to see its eruption at night. It was quite dark. Turning our heads, we saw a huge, black shape moving toward us, and but a few rods away. It was a black bear. He came unconcernedly on, and, seeing us, edged away a trifle, and passed by on the other side of the geyser.

Sometimes the bears are seen early in the morning. I once ran across one thus at the edge of the Grand Canyon.

I do not wonder that those who have never seen bruin in his wild state enjoy seeing him here. He is a comical, interesting fellow, and a harmless one.

THEY are not the type of Wayside Inn that Longfellow so delightfully describes. Although each is built in the old colonial *way*, neither was "built in the old colonial day;" there are no "weather stains upon the wall," there are no "stairways *worn*, and *crazy* doors," no "creaking and uneven floors," and no "Red Horse prances on the sign." But although decidedly modern, these inns, there are resemblances to the dear old Sudbury Inn of the poet. There are "chimneys huge," and "around the fireside at their ease" there sit "groups of friends"

"Who from the far-off noisy town
Had to the Wayside Inn come down."

THE RAVALLI.

The first of these inns is in one of the loveliest valleys of Montana—the Bitter Root Valley.

From the wide verandas of the Ravalli, one of these inns, the Bitter Root range, possibly the roughest, wildest, most unscalable of the sub-ranges of the Rockies, is seen in all its grandeur.

Here is where Father de Smet, the grand old missionary of the '40s, first permanently set up the cross among the Flatheads or Selish Indians, and established the missions among them. Here is where Chief Joseph, the Stonewall Jackson of the Nez Percés passed in '77 on his magnificent retreat before Howard.

The Bitter Root River and affluent streams abound in trout; the mountains are one of the few big-game preserves to be found in the

West to-day. Bear, deer, elk, moose, and above all, the white goat, frequent its granite hills and recesses.

Agriculture? Ride through the valley and see the thousands of acres of clover and alfalfa, and the hundreds of thousands of apple, peach, pear, cherry, and plum trees.

The Ravalli is located at Hamilton, and in plain view from one of its verandas is Marcus Daly's great Montana stock and fruit ranch, which comprises thousands of acres.

Parlors, Ravalli Hotel.

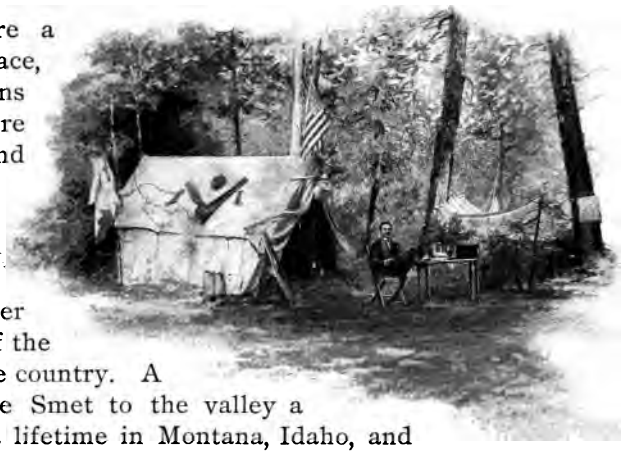
The hotel is a three-storied brick structure, having unusually large rooms and verandas, and in its equipment and appointments it is a complete surprise to one not familiar with it. The same may be said of its cuisine. Bitter Root Valley is noted throughout Montana for the superior quality of its garden products, and after one has tested them at the Ravalli one is not surprised at this.

The Ravalli.

Lobby, Ravalli Hotel.

Hamilton is situated forty odd miles up the valley from the main line of the Northern Pacific at Missoula. For those who are traveling in a leisurely manner for pleasure, or who, making the

transcontinental trip, desire a quiet, retired, homelike place, with modern accommodations at reasonable prices, with pure mountain water to drink and mountain air to breathe, the Ravalli and Hamilton can be unhesitatingly recommended.



Camping in the the Bitter Root Valley.

The hotel is named after Father Ravalli, who is one of the strong historic figures of the country. A Jesuit priest, he followed De Smet to the valley a half century ago, wrought a lifetime in Montana, Idaho, and Washington, and died without again seeing his native land, Italy. This good missionary was also versed in architecture, medicine, the sciences, and in mechanics. Many an old-time pioneer, having no affiliation with the Catholic Church, has blessed the priest for his ministrations as a physician.

A large part of his work was given to the St. Mary's Mission at Stevensville, about half way between Missoula and Hamilton, and there he lies buried. During those early days the Selish Indians lived in the Bitter Root Valley, and as Ravalli's work was largely amongst them, the naming of the hotel after him was a proper and graceful act.

The old name of this valley, the river, and the mountains, was St. Mary's, after the Virgin Mary.

Notwithstanding that the Bitter Root range will tax the wind and muscles of the lustiest of mountaineers to climb among its defiles, canyons, crags, and precipices, yet it is easily accessible by well-worn trails. Back in its piny recesses there are camping spots *par excellence*, where the mountain brooks, breaking wildly from rock-bound gulches, meander through beautiful parks set down at the feet of gigantic granite peaks. At such Elysian spots Nimrod for a time pitches his white tent, and as the mood seizes him, throws his line for trout, knocks over fool hens with a club, or climbs far up the heights to beard the bearded goat, he of the white, long-haired hide, and small, black, tapering horns. Innumerable mountain streams break forth from the snow-capped range, and add their volume to that of the river. Each of these streams is a trout-man's paradise. There is no need of climbing away up into the heart of the range simply to find trout, unless you also desire to experience the change and delights of a camp life for a time. The trout can be found without the climbing, and that not far away.

Take my word for it, and arrange, on your western trip, to stop at Missoula, board the Copper City Limited for Hamilton, and enjoy the restful pleasures of the Ravalli, and the hunting and fishing you will find there.

THE TAVERN OF CASTLE CRAG.

Add another thousand miles to your journey, friend. Leave the Bitter Root and its brother Rockies behind, cross the Cascades, run down from Portland over the unrivaled Shasta Route until you find yourself entangled in a maze of sublime peaks — sharp, abrupt, castled, granite crags — healing springs, and gleeful, dancing mountain streams. There, in the midst of it all, among the trees, in the depths of the mountains, nestles this tavern, and to the north Shasta, the high, white-robed, mountain saint of the region, looks gravely down upon it.

If you walk to the tavern from the station, you follow a winding path lined with cork trees and flanked on one side by a lawn, in which are fruit trees with fruit free to you. If you ride, you enter a large carryall, drawn by a pair of sleek, white horses, that you instinctively know are peculiarly fitted to the place.

You are wonderfully impressed with this nook in the mountains. It is eventime; the tavern and its wide, spacious verandas are resplendent with incandescent lights. The feeling that you are welcome here takes hold of you, and it isn't lessened by the crackle of the pine logs in the big fireplace, once you have passed the portal.

And now to your room for the night. Along a broad hall, and you are ushered into as spick and span and homelike a room as one ever needs or finds in any hotel. You throw open your window, so that the soft, balmy air, impregnated with the elixirs of the forest, may come in, throw yourself upon your royal couch, and — sleep.

Don't miss an early rising, and then throw open the blinds and look out upon the crags — Castle Crags, from which the spot takes its name. Over the tops of the trees you see them peeping furtively down at you, and the sun strikes them sidewise, lighting them up with an ineffable glow.

You breakfast in a large dining-room, plain yet attractive, and with lots of elbow room. Everything is on a broad, open scale here. Money has not been expended lavishly, but certainly not parsimoniously, and no attempt at spread-eagleism has been made.

Now you enact the role of explorer, and as you stray here and there, to the donkey pasture, the chalybeate spring, etc., exploring nooks and making turns about the grounds, laid out in great taste, you feel that you have wandered into a lost corner of the old Eden.

You are plumped down in a picturesque nook in the mountains. You wouldn't be surprised to see a file of Shasta Indians emerge from the forest on yonder trail, it would be so in keeping with

the surroundings. But much as the redman battled with the white here in days long gone by, he is no longer in evidence.

The Sacramento River, a clear, beautiful trout stream, circles around the spot on two sides; the mountains rise about and above us, with trails leading far up their timbered slopes. The great feature of the spot though is that which gives name to it—the Castle Crags.

Mt. Shasta from Shasta View.

Castle Dome of Castle Crags.

The Tavern of Castle Crag.

Battle Rock of Castle Crags.

At first you look up at them with a superficial, passing interest, just as you have at a thousand other objects in nature. Then you look again, and again, and again.

View in Siskiyou Mountains.

From Siskiyou Pass, elevation 4,100 feet.

If you are climbing, you stop and look at them ; if you are sauntering along the tree-fringed walks with the Crags at your back, you turn again and again to see them ; if you are sitting in your room or promenading the vine-shaded porch, you stop to gaze at them. You soon find that they are the center and circumference of everything hereabout ; that they fascinate you ; that their orbit, so to speak, is a large one. Then there is Shasta. It is miles away, and is seen from nearly all points. At some it is quite subordinate to the Crags, at others it divides with them the attraction. As you see it from the tavern through a notch in the mountains, it seems as if it were suspended by an invisible cord from heaven.

From Shasta View we get a fine view of the mountain and also a rather peculiar one of the Crags. That trail will take us there in a few minutes of easy climbing — let us go.

Now seat you down on this rustic seat by the big pine.

Below us the Sacramento winds drowsily along ; a house or two is seen through the trees ; a bit of green meadow and a piece of red roadway add variety to the background ; the railway curves through the middle of the picture — a deep hole in the mountains. Beyond the farther end, where the river and the rails are first seen, as they burst through the gap, stands Shasta, a score of miles away and rising, rising from a long, wide slope of glebe and timber, green and black, into the silent, whitened, majestic pile that God has fashioned it. The timbered parts are somber and heavy, while the snowy peak rises above them, always white, and where the sun glints upon it, it gleams with an intense brightness.

From here the north end only of the Crags is in sight. A half-dozen of them stand immovable beneath the heavy clouds, gray and immaculately clean after last night's pouring rain.

From the View, the Crags appear to possess more individuality than from below. There are not so many of them, and they stand out more as individuals, as units, than they do when so massed together. You cast your eye now on Shasta and now on the big Crags, and between them you have hard work to decide which impresses you the more, and one usually will decide that both do.

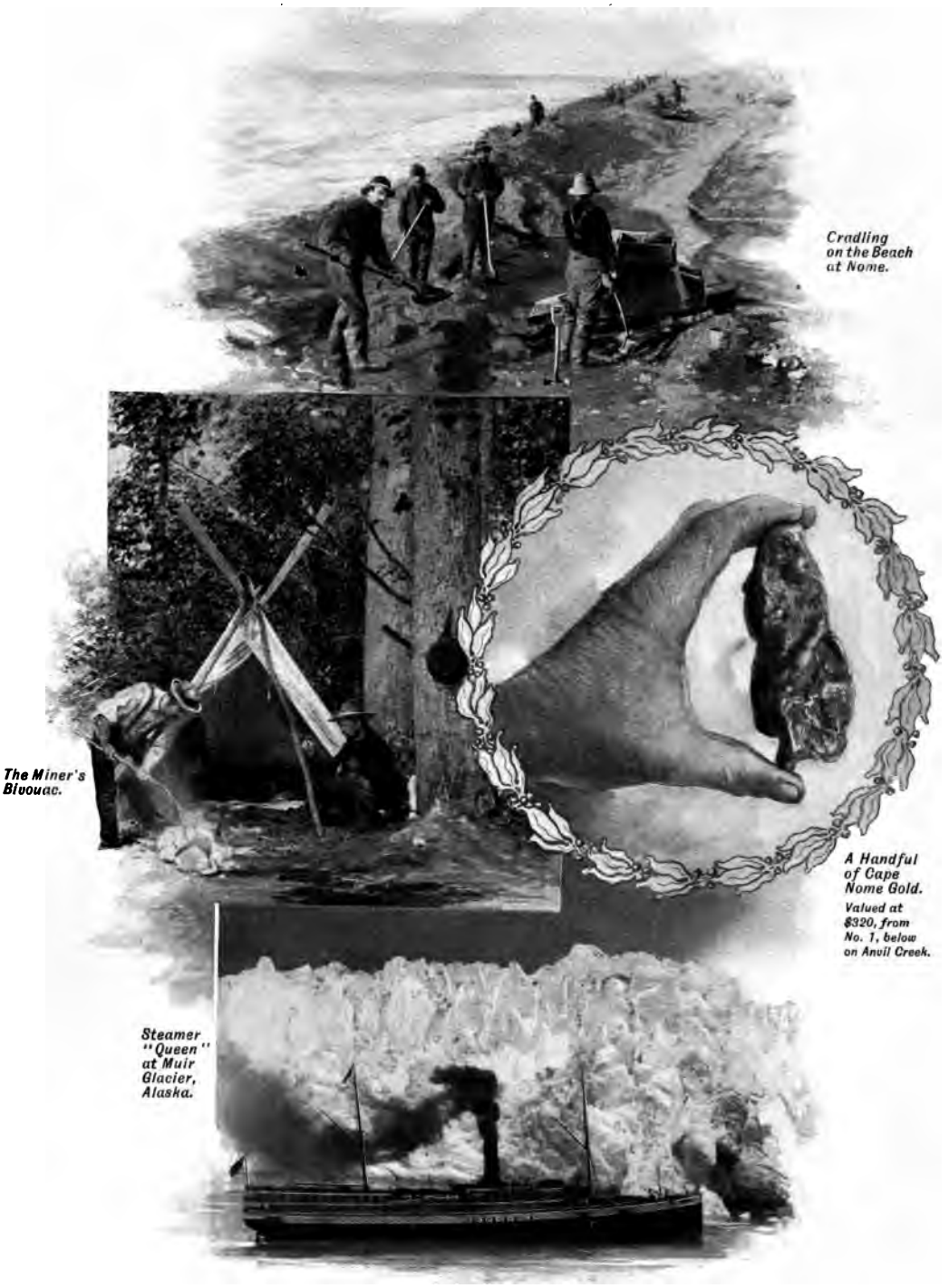
ALASKA continues to be the cynosure of those who watch with interest the development of a little-known region, as well as of those who are anxiously looking for a country where they can get rich quickly. It is, without much doubt, going to continue to interest both classes.

As is now pretty generally known, the word Alaska covers an enormous extent of territory, and one that contains much besides glaciers, high mountains, and a few Indians. Exploration there is hard, slow work, even though prospectors by the thousands, miners, and U. S. Geological Survey parties are engaged in it.

Our outside knowledge of discoveries is apt to be at least a year old when we first hear of them, and what was bonanza last year may be borrasca this year.

The work done within the past two years in improving and enlarging routes and means of transportation has been effective. The horrors of the White and Chilkoot passes have been annihilated by the construction of a railway between Skagway and Lake Bennett. The lakes and stretches of navigable water on the upper Yukon now have steamers plying there, and the places of portage have ample facilities for rapid and easy transportation around them.

Explorers' and prospectors' camps are now scattered over a wide area, making one's chance for life under adverse circumstances much better than formerly.



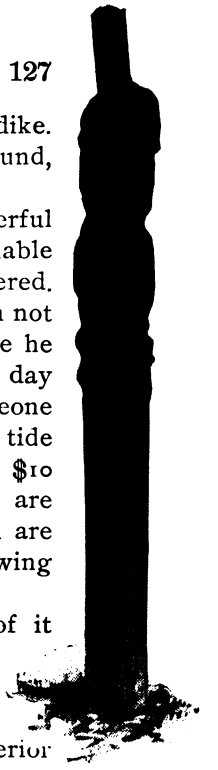
Cradling on the Beach at Nome.

The Miner's Bivouac.

A Handful of Cape Nome Gold.

Valued at $320, from No. 1, below on Anvil Creek.

Steamer "Queen" at Muir Glacier, Alaska.


Totem.

Some new localities are proving greater attractions than Klondike. Such are Lake Atlin, Porcupine District, Prince William's Sound, Copper River, and Cape Nome.

Cape Nome, near St. Michaels, has recently acquired a wonderful notoriety, and people are flocking there in large numbers. Reliable accounts indicate that it is the largest placer field ever discovered. The situation is a peculiar one. The sea beach or tide lands can not be staked or claimed, but one may select each day a spot where he wishes to wash for gold and take out what he can. The next day he may work the same spot again or move elsewhere, and someone else may work that particular field, and thus it goes. At low tide men will thus take out with the shovel and rocker from $5 to $10 worth of gold per day. Mining rules are established, and all are protected in their rights. The lands back from the sand beach are moss grown, but are said to be rich in gold, as are the streams flowing into the sea.

The Copper River country has had some hard things said of it within the past year, but recent reports would show that it may not have deserved them. Trails are being made that avoid the Valdes Glacier, and it is stated that a railroad across the country to the upper Yukon and Dawson may soon be built. The interior country is stated to be rich in copper, while gold may perhaps be found in paying quantities. The Chittyna, Kotschina and Tanana rivers are the fields which are now being assiduously prospected. Coal is stated to have been found, some of it said to be a good anthracite, and if so this will simplify the fuel question, particularly when the establishment of smelters is to be considered.

The summer tourist trip to Alaska still remains the finest in the world. The steamship accommodations are, as they have heretofore been, first-class, and the round trip of about eleven days between Tacoma and Seattle, and Sitka, is educative and pleasurable to the highest degree.

Totem.

NORTHERN PACIFIC RAILWAY

Rates and Arrangements for the Tourist Season of 1900.

MINNESOTA SUMMER RESORTS

During the summer season the Northern Pacific Railway will sell round-trip excursion tickets from St. Paul or Minneapolis to Glenwood (Lake Minnewaska) at $5.25; Battle Lake, $7.50; Fergus Falls, $7.50; Pine River, $7.85; Backus, $8.35; Walker, $8.65; Bemidji, $10.10; Perham, $7.75; Detroit Lake, $9.15; Minnewaukan (Devil's Lake), $18.65; Winnipeg, $22.50. From Duluth to Deerwood, $3.80; Battle Lake, $7.50; Fergus Falls, $7.50; Pine River, $6.90; Backus, $6.90; Walker, $6.90; Bemidji, $6.90; Perham, $7.75; Detroit Lake, $9.15; Minnewaukan, $18.65; Winnipeg, $22.50. From Ashland, Wis., to Battle Lake, $9; Fergus Falls, $9; Pine River, $8.40; Backus, $8.40; Walker, $8.40; Bemidji, $8.40; Perham, $9.25; Detroit Lake, $10.65; Minnewaukan, $20.15; Winnipeg, $22.50. Good going to Minnesota resorts one day (from Ashland two days), to Minnewaukan (Devil's Lake) and Winnipeg two days from date of sale. Good to return on or before October 31st.

YELLOWSTONE PARK RATES

$5 TICKETS. — On sale at Livingston, Mont., June 14 to September 14, 1900, inclusive. The $5 ticket includes railway and stage fares Livingston to Mammoth Hot Springs and return.

$47.50 TICKETS. — A $47.50 round-trip ticket from St. Paul, Minneapolis, or Duluth to Livingston or Mammoth Hot Springs and return, will be on sale at points named from June 12 until September 12, 1900. Limit, good going thirty days, returning ten days; final limit, forty days. The return portion of ticket must be signed and stamped at Livingston, Cinnabar, or Mammoth Hot Springs, and presented on train on or within one day of such date. Stop-over allowed within limit of ticket.

$49.50 TICKETS. — The $49.50 ticket includes railway and stage fares Livingston to Cinnabar and return, stage Cinnabar to Mammoth Hot Springs, Norris, Lower and Upper Geyser Basins, Yellowstone Lake, Grand Cañon, and Falls of the Yellowstone and return, and five and one-half days' board at the Park Association hotels. On sale at Livingston June 14 to September 14, 1900.

$44.50 RATE. — By payment of $22 at Mammoth Hot Springs Hotel to the cashier of the Yellowstone Park Association, and $22.50 to the manager of the Yellowstone National Park Transportation Company, having his office in this hotel, tourists not provided with regular park tickets can secure transportation and hotel accommodations for the regular five and one-half days' tour.

Tourists who are not going west of Livingston should purchase the $47.50 tickets to Mammoth Hot Springs and return, as the round-trip rates to Livingston and Mammoth Hot Springs are the same, while the rate from Livingston through the Park and return is $5 higher than the rate from Mammoth Hot Springs.

$105 TICKET. — This ticket covers rail transportation from St. Paul, Minneapolis, Duluth, or the Superiors to Cinnabar, stage transportation Cinnabar to Mammoth Hot Springs, Lower Fountain and Upper Geyser Basins, Yellowstone Lake, Grand Cañon, Falls of the Yellowstone and Monida, six and one-quarter days' board and lodging between Cinnabar and Monida, and rail transportation from Monida, either via Oregon Short Line R. R. and Union Pacific to Missouri River points, or via O. S. L. R. R. to Ogden, any line Ogden to Denver, thence via either the B. & M. R. R. R., Union Pacific, A., T. & S. F. Ry., or Missouri Pacific Railway to Missouri River terminals.

This ticket will be on sale June 12th to September 12th, and will be limited to thirty days going to Mammoth Hot Springs and thirty days returning, with final limit of sixty days from date of sale.

$85 TICKET. — This ticket covers rail and stage transportation only (no meals or lodging being included therein) for the same tour as the $105 ticket. Limits, selling dates, and other conditions, except as noted, will be same as for $105 ticket.

The trip through the Park must be completed by September 19, 1900.

MONTANA AND EASTERN WASHINGTON POINTS

The Northern Pacific Railway has on sale, at greatly reduced rates, round-trip excursion tickets from St. Paul, Minneapolis, or Duluth to Billings, Springdale, Livingston, and Bozeman, Mont.; Helena, Butte, and Anaconda, Mont. (choice of routes returning, via Northern Pacific or Great Northern Railway lines); Missoula, Mont.; Spokane, Wash. (choice of routes returning, via Oregon Railway & Navigation Company and its connections, or via the Great Northern, or Northern Pacific lines); Medical Lake, Pasco, Kennewick, and Toppenish, Wash.; Nelson, Trail, Rossland, Ainsworth, Kaslo, and Sandon, B. C.; and Coulee City, North Yakima, and Ellensburg, Wash.

These tickets are of iron-clad signature form; require identification of purchaser at return starting point.

Any of the above tickets may read to return via Billings to the Missouri River.

NORTH PACIFIC COAST EXCURSIONS

A $90 round-trip individual excursion ticket, St. Paul, Minneapolis, or Duluth to Tacoma, Portland, Seattle, New Whatcom, Vancouver, or Victoria, is on sale daily at points first named and by Eastern lines.

Tacoma, Seattle, New Whatcom, Victoria, Vancouver, or Portland tickets, at above rates, will be issued, going via Northern Pacific, returning via same route, or Great Northern, or Soo-Pacific to St. Paul, Minneapolis, or Duluth; or via Canadian Pacific to Winnipeg or Port Arthur; or via Billings to the Missouri River; Portland tickets will also be issued, returning via Oregon R. R. & Navigation Company and its connections to either Omaha or Kansas City, or to St. Paul via Sioux City.

Above tickets limited to nine months from date of sale, good, going trip, sixty days to any one of North Pacific Coast termini named, returning any time within final limit.

ALASKA EXCURSIONS

An excursion ticket will be sold from Eastern termini named to Sitka, Alaska, at $150, which rate includes meals and berth on the steamer. Tickets on sale May 1st to September 30th. Limit, nine months. Going to Tacoma, sixty days, returning within final limit, holder to leave Sitka on or before October 31st. Tickets will be issued to return either via the Northern Pacific, Soo-Pacific, or Great Northern lines to St. Paul or Minneapolis, or via Canadian Pacific Railway to Winnipeg or Port Arthur. Usual stop-over privileges granted. Steamer accommodations can be secured in advance by application to any of the agents named on appended list. Diagrams of steamers at office of General Passenger Agent at St. Paul. Steamers call at Glacier Bay during June, July, and August only.

CALIFORNIA EXCURSION RATES

The Northern Pacific Railway will sell round-trip excursion tickets from St. Paul, Minneapolis, or Duluth as follows:

To San Francisco, going via the Northern Pacific, Seattle, and steamer, or Portland and the Shasta Route, or the ocean to San Francisco; returning via rail or steamer to Portland, or via steamer to Seattle, and the Northern Pacific, Great Northern, or Soo-Pacific lines to St. Paul or Minneapolis; or via Canadian Pacific to Winnipeg or Port Arthur; or via Billings to the Missouri River, or via rail or steamer Portland and Huntington to the Missouri River; or returning by the southern lines to Council Bluffs, Omaha, Kansas City, Mineola, or Houston, at $103.50; to New Orleans or St. Louis, at $109.50.

To Los Angeles, going via Portland and Shasta Route, and returning via rail, Portland and the Northern Pacific, Great Northern, or Soo-Pacific lines to St. Paul or Minneapolis; or via Billings or Huntington to the Missouri River, at $122.50; or going via Portland and Shasta Route and returning via San Francisco and Ogden to Council Bluffs, Omaha, or Kansas City, at $113; to St. Louis, at $119.

To San Diego, going via Portland and rail through Los Angeles, and returning via rail, Portland and the Northern Pacific, Great Northern, or Soo-Pacific lines to St. Paul or Minneapolis; or via Canadian Pacific to Winnipeg or Port Arthur; or via Billings or Huntington to the Missouri River, at $129; or going via Portland and Shasta Route and returning via San Francisco and Ogden to Council Bluffs, Omaha, or Kansas City, at $119.50; to St. Louis at $125.50.

Tickets via ocean include meals and berth on steamer.

At the eastern termini of the southern transcontinental lines excursion tickets will be sold, or orders exchanged, for tickets to San Francisco, returning via either the Shasta Route, the all-rail line to Portland, or the ocean and the Northern Pacific to St. Paul, Minneapolis, or Duluth, at a rate $13.50 higher than the current excursion rate in effect between Missouri River points, Mineola, or Houston and San Francisco. The steamship coupon includes first-class cabin passage and meals between San Francisco and Portland.

These excursion tickets allow nine months' time for the round trip; sixty days allowed for west-bound trip up to first Pacific Coast common point; return any time within final limit.

NOTE.—Double daily transcontinental passenger train service commencing April 29, 1900. Reserve your accommodations on the "NORTH COAST LIMITED"—the most complete railway train in the country.

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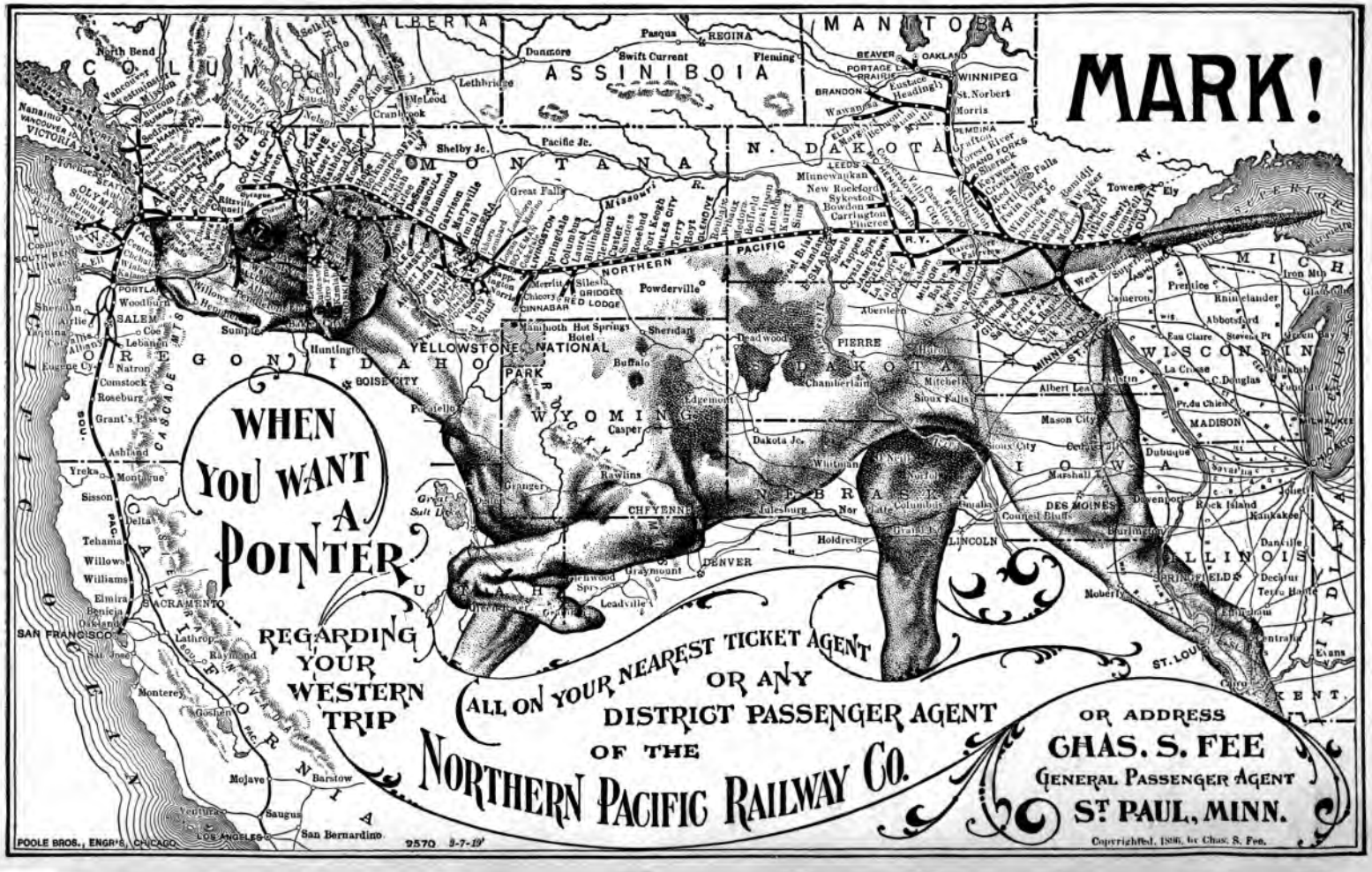
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